

The Commonwealth of Massachusetts

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ANNUAL REPORT

OF THE

TRUSTEES

OF THE

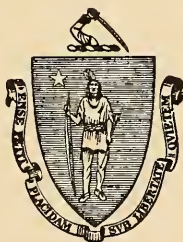
BOSTON STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30, 1922

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THE EIGHTY-SECOND ANNUAL REPORT OF THE HOSPITAL  
FOUNDED IN 1839 BY THE CITY OF BOSTON



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# BOSTON STATE HOSPITAL.

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ERMY C. NOBLE, M.D.	<i>Assistant Superintendent.</i>
MARY E. GILL NOBLE, M.D.	<i>Senior Assistant Physician.</i>
EDMUND M. PEASE, M.D.	<i>Senior Assistant Physician.</i>
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— — — — —	<i>Assistant Physician.</i>
— — — — —	<i>Pathologist.</i>
LAWRENCE H. STONE, D.M.D.	<i>Dentist.</i>
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ADELINE J. LEARY	<i>Treasurer.</i>

## The Commonwealth of Massachusetts

### TRUSTEES' REPORT.

*To His Excellency the Governor and the Honorable Council.*

The trustees of the Boston State Hospital have the honor to submit herewith their fourteenth annual report.

#### PERSONS UNDER THE CARE OF THE TRUSTEES.

On Dec. 1, 1921, there were 1,915 patients in the hospital, 8 in private care, and 289 on visit or escape, a total of 2,212 persons under the care of the Board. On Nov. 30, 1922, the total number was 2,357, of whom 2,033 were in the hospital, 15 in private care, and 309 on visit or escape.

#### CONSTRUCTION AND IMPROVEMENTS.

The addition to the laundry building, which was authorized in 1921, has been completed and the machinery has been installed. In 1922 the following special appropriations were made:—

For the construction of a veranda, C building, East Group . . . . .	\$8,000 00
For the construction of a veranda, G building, East Group . . . . .	5,000 00
For the construction of an addition to the bakery and the purchase of new ovens and equipment . . . . .	36,000 00
For the construction of an addition to the refrigerating room and the purchase of additional machinery . . . . .	23,000 00

The construction authorized in the various items has been completed, the equipment of the bakery is in place, and the installation of the refrigerating machinery nearly completed. The verandas add very much to the comfort of the patients, and increase considerably the usable capacity of the buildings.

Much has been accomplished during the year in the improvement of the grounds and the renovation and repair of the buildings. The filling of the pond has been completed, and

with some additional surfacing a valuable piece of land will have been acquired. The low land behind the dining room of the East Group is being rapidly reclaimed by the dumping of ashes by the city department. Much is yet to be done in the matter of grading, construction of granolithic walks, and planting before the grounds of the hospital will attain the very promising attractiveness of which they are capable, but remarkable progress has been made in view of the limited amount of labor at our disposal.

#### IMPROVEMENTS RECOMMENDED.

The Department of Mental Diseases has recommended appropriations for the following purposes in the coming year: —

Administration building and staff quarters . . . . .	\$130,000 00
Superintendent's house . . . . .	15,000 00
Extension to sewer, water and steam lines . . . . .	12,000 00
Cottage for twenty farm employees . . . . .	26,000 00
Concrete platform for storage of coal . . . . .	5,000 00
Concrete pavement in front of power house . . . . .	9,000 00
Purchase of land and buildings . . . . .	25,000 00
<hr/>	
Total . . . . .	\$222,000 00

#### ESTIMATES FOR MAINTENANCE.

The following are the estimates for the amount needed for maintenance for the ensuing year, based upon the established salary scale and the data furnished by the Department of Mental Diseases: —

Personal services . . . . .	\$359,499 00
Religious instruction . . . . .	2,080 00
Travel, transportation, etc. . . . .	9,100 00
Food . . . . .	198,831 94
Clothing and material . . . . .	35,731 00
Furnishings and household supplies . . . . .	49,379 00
Medical and general care . . . . .	20,858 10
Heat, light and power . . . . .	120,873 14
Farm . . . . .	8,117 00
Garage, stable and grounds . . . . .	15,868 91
Repairs, ordinary . . . . .	25,150 00
Repairs and renewals . . . . .	51,653 75
<hr/>	
Total . . . . .	\$897,101 84

This estimate is based on an expected population of 2,100, and may be compared with the appropriation for the current year of \$727,407 for a population of 2,050.

#### OCCUPATIONAL WORKERS.

There is no therapeutic agency in the hospital which promises a larger contribution to the welfare of the patients in increasing their contentment, self-respect, and in very many cases an improved mental condition, than the various forms of occupation and industry that are found practicable. The industrial rooms have been of service in this respect for a number of years, but these are available for only certain classes of patients. The present year the addition to our staff of a few persons skilled in occupational therapy has enabled us to extend this service to a larger number of patients on the wards. The expense of furnishing such a teacher for every ward in the hospital would be more than justified by the results, of which our present experience is an assurance.

#### ADMINISTRATIVE DETAILS.

The reports of the superintendent and treasurer and the statistical data which are appended give in full detail the operations of the hospital during the past year.

HENRY LEFAVOUR.  
KATHERINE G. DEVINE.  
JOHN A. KIGGEN.  
WILLIAM F. WHITTEMORE.  
CHARLES B. FROTHINGHAM.  
EDNA W. DREYFUS.  
DAVID M. WATCHMAKER.

Nov. 30, 1922.

## SUPERINTENDENT'S REPORT.

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*To the Board of Trustees of the Boston State Hospital.*

In accordance with the provisions of the statutes, I am submitting for your consideration the report of the superintendent for the statistical year ending Sept. 30, 1922, and the fiscal year ending Nov. 30, 1922. Founded by the city of Boston in 1839, this marks the completion of the eighty-third year of the institution as a hospital for mental diseases and the fourteenth year of its history as a State hospital.

### MOVEMENT OF POPULATION.

The census of the hospital on Sept. 30, 1921, was as follows: in the wards, men, 869, women, 1,070, total, 1,939; at home on visit, men, 103, women, 165, total, 268; boarding out, women, 8; and out on escape, men, 2; making a total of 2,217, 974 men and 1,243 women, in the custody of the hospital.

Three hundred and twenty-one men and 328 women, a total of 649, were received during the year. This included the following: first admissions as insane, men, 235, women, 244,<sup>1</sup> total, 479;<sup>1</sup> readmissions as insane, men, 59, women, 59, total, 118; first admissions, temporary care, men, 8, women, 5, total, 13; re-admissions, temporary care, men, 9, women, 4, total, 13; and transferred from other institutions, men, 10, women, 19, total, 29. Two hundred and thirty-six cases, including 119 men and 117 women, were discharged during the year. Eight men and 12 women, a total of 20, were transferred to other institutions. One hundred and forty-six men and 113 women, a total of 259, died during the year.

The census on Sept. 30, 1922, was as follows: in the wards, men, 914, women, 1,144, total, 2,058; at home on visit, men, 98, women, 170, total, 268; boarding out, men, 1, women, 13, total, 14; and out on escape, men, 9, women, 2, total, 11;

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<sup>1</sup> Including three committed from temporary care at the beginning of the year.



making a total of 2,351, 1,022 men and 1,329 women, in the custody of the hospital.

The total number of cases treated during the year was 2,866, 1,295 men and 1,571 women.

The average daily number of patients for the statistical year was: men, 998.62, women, 1,280.82, total, 2,279.44. The average daily number in the wards was: men, 886.41, women, 1,091.96, total, 1,978.37, or 86.79 per cent of the whole number. The average daily number at home on visit was: men, 106.77, women, 177.60, total, 284.37, or 12.47 per cent. The average daily number boarding out was: men, .57, women, 10.15, total, 10.72, or .47 per cent. The average daily number out on escape was: men, 4.87, women, 1.11, total, 5.98, or .27 per cent. The average daily number of committed cases was: men, 873.73, women, 1,069.79, total, 1,943.52, or 98.24 per cent of the number in the wards. The average daily number of voluntary cases was: men, 10.45, women, 20.78, total, 31.23, or 1.58 per cent. The average daily number of emergency cases was: men, .02, women, .06, total, .08, or .004 per cent. The average daily number of cases under complaint or indictment was: men, 9.54, women, 2.92, total, 12.46, or .63 per cent. The average daily number of temporary care cases was: men, 2.22, women, 1.40, total, 3.62, or .18 per cent. The average daily number of epileptics was: men, 14.42, women, 13.17, total, 27.59, or 1.40 per cent. The average daily number of private cases was: men, 19.42, women, 54.17, total, 73.59, or 3.72 per cent. The average daily number of reimbursing cases was: men, 21.27, women, 96.78, total, 118.05, or 5.97 per cent. The average daily number of cases supported by the State was: men, 845.72, women, 941.01, total, 1,786.73, or 90.31 per cent. There was a daily average of 58.59 ex-service men.

The recovery rate, based on the number of first admissions, was 15.87 per cent; based on the total number cared for during the year, 2.65 per cent; based on the average daily number in the wards, 3.84 per cent; and based on the total admissions for the year, 12.9 per cent.

The death rate, based on the total number cared for during the year, was 9.13 per cent; and based on the average daily number in the wards, 13.10 per cent. The death rate of the hospital is unusually large when compared with that of other institutions of a similar character, as over 30 per cent of the



population is of the infirm type, and 8 per cent represents actual bed cases. This is due to the fact that the acutely ill, the senile and the infirm cases from the city cannot be readily transported to distant institutions, and are therefore committed to the Boston State Hospital. It is obvious that for the same reason too much significance should not be attached to the recovery rate.

Of the first admissions as insane, 249, or 52 per cent, were foreign born, and 409, or 85.39 per cent, were of foreign parentage on one or both sides. One hundred and sixteen, or 24.22 per cent, were aliens.

The average age on admission was 49.15; 148, or 30.9 per cent, were sixty years of age or over, and 81, or 16.91 per cent, were seventy years of age or over.

The first admissions for the year, classified according to legal status, were as follows: —

	Males.	Females.	Totals.
Committed cases (section 51, chapter 123, General Laws)	194	206	400
Voluntary admissions (section 86, chapter 123, General Laws).	—	—	—
Emergency commitments (section 78, chapter 123, General Laws).	4	6	10
Cases held under complaint or indictment (section 100, chapter 123, General Laws).	3	2	5
Temporary care cases (section 79, chapter 123, General Laws).	25	25	50
Observation cases (section 77, chapter 123, General Laws)	9	4	13
Boston police cases (chapter 307, Acts of 1910) . . . . .	—	1	1
Total . . . . .	235	244	479

The distribution of first admissions for the year, classified according to legal status, as shown by the above table, is therefore as follows: committed cases (section 51, chapter 123, General Laws), 83.51 per cent; voluntary admissions (section 86, chapter 123, General Laws), none; emergency commitments (section 78, chapter 123, General Laws), 2.09 per cent; cases held under complaint or indictment (section 100, chapter 123, General Laws), 1.04 per cent; temporary care cases (section 79, chapter 123, General Laws), 10.44 per cent; observation cases (section 77, chapter 123, General Laws), 2.71 per cent; and Boston police cases (chapter 307, Acts of 1910), .21 per cent. No cases pending examination and hearing (section 55, chapter 123, General Laws) were admitted during the year.

Four hundred committed cases (section 51, chapter 123, General Laws) were admitted during the year. Of these, 9 or 2.25 per cent, were discharged; 4, or .1 per cent, were transferred to other institutions for mental diseases; 68, or 17 per cent, died; and 319, or 79.75 per cent, remained at the end of the statistical year.

Ten emergency cases (section 78, chapter 123, General Laws), were admitted during the year. These were all committed within a few days after admission, and none remained at the end of the statistical year.

Five cases, held under complaint or indictment, were admitted under the provisions of section 100 of chapter 123 of the General Laws. One of these was transferred to another institution and 4 remained in the hospital at the end of the statistical year.

Fifty temporary care cases (section 79, chapter 123, General Laws) were admitted during the year. Of these, 47, or 94 per cent, were committed; and 3, or 6 per cent, changed to emergency status.

Thirteen cases were admitted for observation (section 77, chapter 123, General Laws) during the year. Eleven, or 84.61 per cent, of these were subsequently committed, and 2, or 15.39 per cent, changed to voluntary status.

Of the 479 first admissions, the cause was unascertained or no cause given in 175 cases, or 36.53 per cent. In the 304 cases where a definite cause was assigned the etiological factors reported may be classified as follows: senility, 61, or 20.06 per cent; arteriosclerosis, 44, or 14.47 per cent; syphilis, 45, or 14.80 per cent; alcoholism, 48, or 15.79 per cent; involutional changes, 11, or 3.61 per cent; and traumatism, 9, or 2.96 per cent. There was a family history of mental diseases in 86, or 17.95 per cent, mental defects in 17, or 3.55 per cent, and nervous diseases in 30, or 6.26 per cent, of the first admissions.

The forms of mental disease shown by the first admissions briefly summarized were as follows: senile psychoses, 59, or 12.32 per cent; psychoses with cerebral arteriosclerosis, 85, or 17.74 per cent; general paralysis, 49, or 10.23 per cent; psychoses with other brain or nervous diseases, 6, or 1.25 per cent; alcoholic psychoses, 45, or 9.39 per cent; psychoses with other somatic diseases, 15, or 3.14 per cent; manic-depressive psychoses, 51, or 10.64 per cent; involution melancholia, 13, or

2.71 per cent; dementia praecox, 76, or 15.84 per cent; paranoia or paranoid conditions, 27, or 5.64 per cent; psychoses with mental deficiency, 15, or 3.14 per cent; undiagnosed psychoses, 13, or 2.71 per cent; and all other psychoses 1 per cent or less. The psychoses of all first admissions are shown in Table No. 6, on page 55.

The forms of mental disease shown by the readmissions, briefly summarized, were as follows: senile psychoses, 4, or 3.19 per cent; psychoses with cerebral arteriosclerosis, 4, or 3.19 per cent; general paralysis, 7, or 5.93 per cent; alcoholic psychoses, 12, or 10.17 per cent; manic-depressive, 31, or 26.27 per cent; dementia praecox, 30, or 25.42 per cent; paranoia or paranoid conditions, 8, or 6.38 per cent; psychoses with mental deficiency, 4, or 3.19 per cent; and all other psychoses 1 per cent or less.

Of these readmissions, 88, or 74.58 per cent, were committed under the provisions of section 51, chapter 123, General Laws; 11, or 9.32 per cent, were voluntary admissions (section 86, chapter 123, General Laws); 2, or 1.70 per cent, held under complaint or indictment, were committed under the provisions of section 100, chapter 123, General Laws; 7, or 5.93 per cent, were temporary care cases (section 79, chapter 123, General Laws); 9, or 7.62 per cent, were observation cases (section 77, chapter 123, General Laws); and 1, or .85 per cent, was committed as a Boston police case under the provisions of chapter 307, Acts of 1910.

The following tables show the psychoses of all first admissions classified according to legal status: —

*Psychoses of Committed Cases (Section 51, Chapter 123, General Laws).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Traumatic psychoses . . . . .	3	—	3	3	—	3
Senile psychoses . . . . .	22	30	52	22	30	52
Simple deterioration . . . . .	15	12	27			
Presbyophrenic type . . . . .	1	2	3			
Delirious and confused . . . . .	—	—	—			
Depressed and agitated . . . . .	1	9	10			
Paranoid states . . . . .	2	5	7			
Presenile types . . . . .	3	2	5			
Psychoses with cerebral arteriosclerosis . . . . .	26	32	58	26	32	58

*Psychoses of Committed Cases (Section 51, Chapter 123, General Laws) —*  
*Concluded.*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
General paralysis . . . . .	..	..	..	38	9	47
Psychoses with cerebral syphilis . . . . .	..	..	..	-	2	2
Psychoses with Huntington's chorea . . . . .	..	..	..	1	-	1
Psychoses with brain tumor . . . . .	..	..	..	-	1	1
Psychoses with other brain or nervous diseases . . . . .	..	..	..	2	3	5
Cerebral hemorrhage . . . . .	-	1	1			
Cerebral embolism . . . . .	-	1	1			
Paralysis agitans . . . . .	1	-	1			
Cerebrospinal meningitis . . . . .	1	-	1			
Spastic paraplegia . . . . .	-	1	1			
Alcoholic psychoses . . . . .	..	..	..	25	13	38
Pathological intoxication . . . . .	4	1	5			
Delirium tremens . . . . .	..	-	-			
Acute hallucinosis . . . . .	5	5	10			
Acute paranoid type . . . . .	3	1	4			
Korsakow's psychosis . . . . .	..	2	2			
Chronic hallucinosis . . . . .	5	2	7			
Chronic paranoid type . . . . .	5	1	6			
Alcoholic deterioration . . . . .	3	1	4			
Other types . . . . .	-	-	-			
Psychoses with pellagra . . . . .	..	..	..	-	1	1
Psychoses with other somatic diseases . . . . .	..	..	..	2	8	10
Post-infectious psychosis . . . . .	-	1	1			
Exhaustion delirium . . . . .	-	2	2			
Delirium of unknown origin . . . . .	-	1	1			
Cardiorenal disease . . . . .	2	-	2			
Carcinoma . . . . .	..	2	2			
Uremia . . . . .	-	1	1			
Acute nephritis . . . . .	-	1	1			
Manic-depressive psychoses . . . . .	..	..	..	8	35	43
Manic type . . . . .	7	17	24			
Depressive type . . . . .	-	17	17			
Stuporous type . . . . .	..	-	-			
Mixed type . . . . .	1	1	2			
Circular type . . . . .	-	-	-			
Involution melancholia . . . . .	..	..	..	7	5	12
Dementia præcox . . . . .	..	..	..	42	29	71
Paranoid type . . . . .	23	14	37			
Catatonic type . . . . .	12	7	19			
Hebephrenic type . . . . .	6	5	11			
Simple type . . . . .	1	3	4			
Paranoia or paranoid conditions . . . . .	..	..	..	3	19	22
Epileptic psychoses . . . . .	..	..	..	1	1	2
Clouded states . . . . .	1	1	2			
Psychoneuroses and neuroses . . . . .	..	..	..	-	-	-
Psychoses with psychopathic personality . . . . .	..	..	..	1	2	3
Psychoses with mental deficiency . . . . .	..	..	..	7	6	13
Undiagnosed psychoses . . . . .	..	..	..	6	4	10
Without psychosis . . . . .	..	..	..	-	6	6
Mental deficiency without psychosis . . . . .	-	6	6			
Total . . . . .	..	..	..	194	206	400

*Psychoses of Emergency Cases (Section 78, Chapter 123, General Laws).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Senile psychoses . . . . .	1	—	1	1	—	1
Paranoid type . . . . .	1	—	1			
Psychoses with cerebral arteriosclerosis . . . . .	—	—	—	2	2	4
Alcoholic psychoses . . . . .	—	1	1	—	1	1
Alcoholic deterioration . . . . .	—	1	1			
Psychoses with other somatic diseases . . . . .	—	1	1	—	1	1
Pernicious anemia . . . . .	—	1	1			
Involution melancholia . . . . .	—	—	—	1	—	1
Dementia praecox . . . . .	—	1	1	—	1	1
Paranoid type . . . . .	—	1	1			
Paranoia or paranoid condition . . . . .	—	—	—	—	1	1
Total . . . . .	—	—	—	4	6	10

*Psychoses of Cases held under Complaint or Indictment (Section 100, Chapter 123, General Laws).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Alcoholic psychoses . . . . .	1	—	1	1	—	1
Pathological intoxication . . . . .	1	—	1			
Manic-depressive psychoses . . . . .	—	1	1	—	1	1
Depressive type . . . . .	—	1	1			
Dementia praecox . . . . .	—	1	1	—	1	1
Paranoid type . . . . .	—	1	1			
Undiagnosed psychoses . . . . .	—	—	—	2	—	2
Total . . . . .	—	—	—	3	2	5



*Psychoses of Temporary Care Cases (Section 79, Chapter 123, General Laws).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Senile psychoses . . . . .	2	2	4	2	4	6
Simple deterioration . . . . .	—	1	1	—	1	1
Depressed and agitated type . . . . .	—	1	1	—	1	1
Paranoid type . . . . .	—	1	1	—	1	1
Psychoses with cerebral arteriosclerosis . . . . .	—	—	—	10	12	22
General paralysis . . . . .	—	—	—	2	—	2
Psychosis with other brain or nervous disease . . . . .	—	—	—	—	1	1
Encephalitis lethargica . . . . .	—	1	1	—	1	1
Alcoholic psychoses . . . . .	—	—	—	2	—	2
Acute hallucinosis . . . . .	1	—	1	—	—	—
Chronic paranoid type . . . . .	1	—	1	—	—	—
Psychoses with other somatic diseases . . . . .	—	—	—	2	2	4
Cardiorenal disease . . . . .	1	—	1	—	—	—
Carcinoma . . . . .	1	—	1	—	—	—
Sarcoma . . . . .	—	1	1	—	—	—
Chronic enteritis . . . . .	—	1	1	—	—	—
Manic-depressive psychoses . . . . .	—	—	—	3	1	4
Manic type . . . . .	1	—	1	—	—	—
Depressive type . . . . .	2	1	3	—	—	—
Dementia præcox . . . . .	—	—	—	—	1	1
Paranoid type . . . . .	—	1	1	—	—	—
Paranoia or paranoid conditions . . . . .	—	—	—	—	4	4
Epileptic psychoses . . . . .	—	—	—	2	—	2
Clouded states . . . . .	2	—	2	—	—	—
Psychosis with psychopathic personality . . . . .	—	—	—	1	—	1
Undiagnosed psychosis . . . . .	—	—	—	1	—	1
Total . . . . .	—	—	—	25	25	50

*Psychoses of Observation Cases (Section 77, Chapter 123, General Laws).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Psychoses with cerebral arteriosclerosis . . . . .	—	—	—	1	—	1
Alcoholic psychoses . . . . .	—	—	—	3	—	3
Acute paranoid type . . . . .	1	—	1	—	—	—
Chronic paranoid type . . . . .	1	—	1	—	—	—
Alcoholic deterioration . . . . .	1	—	1	—	—	—
Manic-depressive psychoses . . . . .	—	—	—	—	3	3
Depressive type . . . . .	—	3	3	—	—	—
Dementia præcox . . . . .	—	—	—	1	—	1
Paranoid type . . . . .	1	—	1	—	—	—
Psychoneuroses and neuroses . . . . .	—	—	—	3	—	3
Neurasthenic type . . . . .	2	—	2	—	—	—
Anxiety neurosis . . . . .	1	—	1	—	—	—
Psychoses with mental deficiency . . . . .	—	—	—	1	1	2
Total . . . . .	—	—	—	9	4	13



*Psychosis of Boston Police Case (Chapter 307, Acts of 1910).*

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Dementia praecox . . . . .	·	·	·	-	1	1
Hebephrenic type . . . . .	·	·	·			

Seventy-three temporary care cases (section 79, chapter 123, General Laws) were admitted during the year ending Sept. 30, 1922. Fifty-four were committed under the provisions of section 51, chapter 123, General Laws, 4 changed to emergency status, none to voluntary, and 2 to observation status. Of the 7 discharges, 6, or 85.71 per cent, were discharged as unimproved; and 1, or 14.29 per cent, as without psychosis. Four died, 1 was transferred, and 1 remained at the end of the statistical year.

Two Boston police cases (chapter 307, Acts of 1910) were admitted during the year. These were both committed.

Ten emergency cases (section 78, chapter 123, General Laws) were admitted during the year. All of these were committed, leaving none at the end of the statistical year. In addition to this, there should be noted 4 cases shown in the admissions for the year as temporary care cases, later committed under the provisions of section 78, and finally under section 51, chapter 123, General Laws.

Thirty-three observation cases (section 77, chapter 123, General Laws) were admitted during the year. Twenty were committed, 10 discharged, 2 were changed to voluntary status, none died and 1 case remained at the end of the statistical year. Of the 10 discharges, 4, or 40 per cent, were discharged as recovered; 1, or 10 per cent, as improved; 1, or 10 per cent, as unimproved; and 4, or 40 per cent, as without psychosis. In addition to this there should be noted 2 cases shown in the admissions for the year as temporary care cases, and subsequently committed under the provisions of section 77, chapter 123, General Laws.

Seven cases held under complaint or indictment (section 100, chapter 123, General Laws) were admitted during the year. Of these, 1 was transferred to another hospital, and the remaining 6 are still in the institution.

Ten voluntary cases (section 86, chapter 123, General Laws) were admitted during the year. One of these was committed, 1 discharged, none died, and 8 remained at the end of the statistical year. In addition to the above, 2 cases shown in the admissions for the year as observation cases (section 77, chapter 123, General Laws) were changed to voluntary status.

The following table shows the psychoses of all cases admitted as temporary care and subsequently committed under the provisions of section 51, chapter 123, General Laws:—

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Senile psychoses . . . . .	2	2	4	3	4	7
Simple deterioration . . . . .	—	1	1			
Depressed and agitated type . . . . .	1	1	2			
Paranoid type . . . . .						
Psychoses with cerebral arteriosclerosis . . . . .				13	15	28
General paralysis . . . . .				3	—	3
Psychoses with other brain or nervous diseases . . . . .				1	1	2
Encephalitis lethargica . . . . .	1	1	2			
Alcoholic psychoses . . . . .				6	4	10
Acute hallucinosis . . . . .	1	—	1			
Chronic hallucinosis . . . . .	—	1	1			
Acute paranoid type . . . . .	1	—	1			
Chronic paranoid type . . . . .	2	—	2			
Alcoholic deterioration . . . . .	2	3	5			
Psychoses with other somatic diseases . . . . .				2	3	5
Cardiorenal disease . . . . .	1	—	1			
Carcinoma . . . . .	1	—	1			
Sarcoma . . . . .	—	1	1			
Pernicious anemia . . . . .	—	1	1			
Chronic enteritis . . . . .	—	1	1			
Manic-depressive psychoses . . . . .				5	6	11
Manic type . . . . .	3	3	6			
Depressive type . . . . .	2	3	5			
Involution melancholia . . . . .				1	—	1
Dementia praecox . . . . .				3	4	7
Paranoid type . . . . .	2	2	4			
Hebephrenic type . . . . .	1	2	3			
Paranoia or paranoid conditions . . . . .				—	7	7
Epileptic psychoses . . . . .				2	—	2
Clouded states . . . . .	2	—	2			
Psychoneuroses and neuroses . . . . .				1	1	2
Hysterical type . . . . .	—	1	1			
Neurasthenic type . . . . .	1	—	1			
Psychoses with psychopathic personality . . . . .				1	1	2
Psychoses with mental deficiency . . . . .				1	1	2
Undiagnosed psychosis . . . . .				1	—	1
Total . . . . .				43	47	90

The following table shows the psychoses of all admissions during the year, exclusive of transfers:—

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Traumatic psychoses . . . . .	4	—	4			
Senile psychoses . . . . .	27	41	68			
Simple deterioration . . . . .	17	18	35			
Presbyophrenic type . . . . .	3	2	5			
Delirious and confused types . . . . .	—	—	—			
Depressed and agitated types . . . . .	1	11	12			
Paranoid types . . . . .	3	8	11			
Presenile type . . . . .	3	2	5			
Psychoses with cerebral arteriosclerosis . . . . .	42	48	90			
General paralysis . . . . .	47	10	57			
Psychoses with cerebral syphilis . . . . .	3	2	5			
Psychosis with Huntington's chorea . . . . .	1	—	1			
Psychosis with brain tumor . . . . .	—	1	1			
Psychoses with other brain or nervous diseases . . . . .	4	5	9			
Cerebral embolism . . . . .	—	2	2			
Paralysis agitans . . . . .	1	—	1			
Meningitis, tubercular or other forms . . . . .	1	—	1			
Multiple sclerosis . . . . .	—	—	—			
Tabes dorsalis . . . . .	1	—	1			
Acute chorea . . . . .	—	—	—			
Other diseases . . . . .	1	3	4			
Alcoholic psychoses . . . . .	41	18	59			
Pathological intoxication . . . . .	6	1	7			
Delirium tremens . . . . .	—	—	—			
Acute hallucinosis . . . . .	6	5	11			
Chronic hallucinosis . . . . .	8	3	11			
Korsakow's psychosis . . . . .	—	2	2			
Acute paranoid type . . . . .	5	1	6			
Chronic paranoid type . . . . .	7	1	8			
Alcoholic deterioration . . . . .	9	5	14			
Other types, acute or chronic . . . . .	—	—	—			
Psychosis due to drugs or other exogenous toxins . . . . .	1	—	1			
Opium . . . . .	1	—	1			
Psychosis with pellagra . . . . .	—	1	1			
Psychoses with other somatic diseases . . . . .	5	14	19			
Delirium with infectious disease . . . . .	—	—	—			
Post-infectious psychosis . . . . .	—	1	1			
Exhaustion delirium . . . . .	—	2	2			
Delirium of unknown origin . . . . .	1	1	2			
Cardiorenal diseases . . . . .	3	1	4			
Diseases of the ductless glands . . . . .	—	—	—			
Other diseases or conditions . . . . .	1	9	10			
Manic-depressive psychoses . . . . .	25	57	82			
Manic type . . . . .	13	23	36			
Depressive type . . . . .	9	32	41			
Stuporous type . . . . .	1	—	1			
Mixed type . . . . .	2	2	4			
Circular type . . . . .	—	—	—			
Involution melancholia . . . . .	8	6	14			
Dementia præcox . . . . .	60	47	107			
Paranoid type . . . . .	34	25	59			
Catatonic type . . . . .	14	7	21			
Hebephrenic type . . . . .	8	11	19			
Simple type . . . . .	4	4	8			
Other types . . . . .	—	—	—			

	Males.	Females.	Totals.	TOTAL.		
				Males.	Females.	Totals.
Paranoia or paranoid conditions . . . . .	.	.	.	3	33	36
Epileptic psychoses . . . . .	.	.	.	3	1	4
Epileptic deterioration . . . . .	.	.	.			
Epileptic clouded states . . . . .	3	1	4			
Other epileptic types . . . . .	—	—	—			
Psychoneuroses and neuroses . . . . .	.	.	.	3	3	6
Hysterical type . . . . .	.	1	1			
Psychasthenic type . . . . .	1	—	1			
Neurasthenic type . . . . .	2	2	4			
Anxiety neuroses . . . . .	—	—	—			
Other types . . . . .	—	—	—			
Psychoses with psychopathic personality . . . . .	.	.	.	2	4	6
Psychoses with mental deficiency . . . . .	.	.	.	13	8	21
Undiagnosed psychoses . . . . .	.	.	.	10	4	14
Without psychosis . . . . .	.	.	.	9	9	18
Epilepsy without psychosis . . . . .	—	—	—			
Alcoholism without psychosis . . . . .	1	—	1			
Drug addiction without psychosis . . . . .	—	—	—			
Psychopathic personality without psychosis . . . . .	3	1	4			
Mental deficiency without psychosis . . . . .	1	7	8			
Others . . . . .	4	1	5			
Arteriosclerosis . . . . .	1	—	1			
Simple depression . . . . .	1	—	1			
Acute delirium . . . . .	1	—	1			
Neurasthenia . . . . .	—	1	1			
Family dissension . . . . .	1	—	1			
Total . . . . .	.	.	.	311	312	623

The psychoses represented by the cases discharged from the hospital during the year were as follows: traumatic psychoses, 1, or .46 per cent; senile psychoses, 6, or 2.77 per cent; psychoses with cerebral arteriosclerosis, 13, or 6.02 per cent; general paralysis, 6, or 2.77 per cent; psychoses with cerebral syphilis, 1, or .46 per cent; alcoholic psychoses, 20, or 9.22 per cent; psychoses due to drugs and other exogenous toxins, 1, or .46 per cent; psychoses with other somatic diseases, 3, or 1.38 per cent; manic-depressive psychoses, 79, or 36.41 per cent; involution melancholia, 10, or 4.63 per cent; dementia praecox, 46, or 21.69 per cent; paranoia or paranoid conditions, 10, or 4.61 per cent; epileptic psychosis, 1, or .46 per cent; psychoneuroses and neuroses, 4, or 1.84 per cent; psychoses with psychopathic personality, 8, or 3.68 per cent; psychoses with mental deficiency, 2, or .92 per cent; and without psychoses, 3, or 1.38 per cent.

The total number of cases discharged during the year was 217. Of this number, 76, or 35.02 per cent, were discharged as

recovered; 108, or 49.77 per cent, as improved; 30, or 13.83 per cent, as unimproved; and 3, or 1.38 per cent, as without psychosis. Of the 76 recovered cases, 57, or 75 per cent, were cases of manic-depressive psychoses; 10, or 13.16 per cent, alcoholic psychoses; 4, or 5.26 per cent, psychoses with psychopathic personality; and 3, or 4 per cent, psychoses with other somatic diseases. Of the 108 cases discharged as improved, 34, or 31.48 per cent, were cases of dementia praecox; 22, or 20.37 per cent, manic-depressive psychoses; 12, or 11.11 per cent, psychoses with cerebral arteriosclerosis; 9, or 8.33 per cent, alcoholic psychoses; 6, or 5.55 per cent, paranoia or paranoid conditions; 4, or 3.7 per cent, psychoses with psychopathic personality; and 3, or 2.78 per cent, each of general paralysis and psychoneuroses and neuroses. Of the 30 cases discharged as unimproved, 13, or 43.35 per cent, were dementia praecox; 4, or 13.33 per cent, senile psychoses; 3, or 10 per cent, general paralysis; 3, or 10 per cent, involution melancholia; and 3, or 10 per cent, paranoia or paranoid conditions.

A study of the entire hospital residence (including other institutions for mental diseases) of the cases discharged during the statistical year is of considerable interest. Twelve, or 5.53 per cent, were discharged after a residence of less than one month; 75, or 34.56 per cent, after a residence of from one to six months; 38, or 17.51 per cent, from six months to one year; 39, or 17.97 per cent, from one to two years; 18, or 8.29 per cent, two to three years; 13, or 5.99 per cent, three to four years; 5, or 2.30 per cent, four to five years; 14, or 6.45 per cent, five to ten years; and 3, or 1.38 per cent, over ten years. The average duration of total hospital residence was 1 year, six months and twenty-one days.

Of the 255 deaths occurring during the year, 147, or 57.70 per cent, represented cases dying at the age of sixty or over. In 79 cases, or 30.98 per cent, death occurred at the age of seventy or over.

The principal causes of death during the year were as follows: bronchopneumonia, 80, or 31.30 per cent; arteriosclerosis, 32, or 12.55 per cent; tuberculosis of the lungs, 22, or 8.63 per cent; chronic endocarditis, 21, or 8.23 per cent; chronic myocarditis, 16, or 6.27 per cent; general paralysis of the insane, 15, or 5.88 per cent; and cerebral hemorrhage, 10, or 3.92 per cent.



The psychoses represented by deaths occurring in the hospital during the year were as follows: senile psychoses, 50, or 19.62 per cent; psychoses with cerebral arteriosclerosis, 74, or 29.02 per cent; general paralysis, 48, or 18.82 per cent; psychoses with cerebral syphilis, 4, or 1.57 per cent; psychoses with other brain or nervous diseases, 5, or 1.96 per cent; alcoholic psychoses, 7, or 2.74 per cent; psychoses with other somatic diseases, 9, or 3.53 per cent; manic-depressive psychoses, 13, or 5.10 per cent; involution melancholia, 7, or 2.74 per cent; dementia praecox, 24, or 9.42 per cent; paranoia or paranoid conditions, 6, or 2.35 per cent; and epileptic psychoses, 4, or 1.57 per cent. Of the 50 cases of senile psychoses dying in the hospital during the year, 15, or 30 per cent, were due to bronchopneumonia. Of the 74 cases of arteriosclerotic psychoses, death was due in 24, or 32.43 per cent, to bronchopneumonia, and in 21, or 28.38 per cent, death was attributed directly to arteriosclerosis. Of the 48 cases of general paralysis, 27, or 25.25 per cent, were reported as dying from bronchopneumonia, and in 15, or 31.25 per cent, general paralysis of the insane was given as the cause of death. Of the 24 cases of dementia praecox, death was due in 14, or 58.33 per cent, to pulmonary tuberculosis. Of the 7 cases of involution melancholia, the cause of death was reported as bronchopneumonia in 2, or 28.57 per cent.

Of the 255 patients dying in the hospital during the year the total duration of hospital residence was as follows: one year or less, 134, or 52.55 per cent; one to two years, 40, or 15.68 per cent; two to three years, 19, or 7.45 per cent; three to four years, 11, or 4.31 per cent; four to five years, 7, or 2.74 per cent; five to six years, 6, or 2.35 per cent; six to seven years, 10, or 3.92 per cent; seven to eight years, 6, or 2.35 per cent; eight to nine years, 2, or .78 per cent; nine to ten years, 1, or .39 per cent; ten to fifteen years, 13, or 5.10 per cent; fifteen to twenty years, 3, or 1.18 per cent; and over twenty years, 3, or 1.18 per cent. The average duration of hospital residence of the cases dying in the hospital during the year was two years, seven months and twenty-one days. The psychoses showing the longest hospital residence were as follows: dementia praecox, 2 over twenty-three years and 1 thirty-three years; and cerebral arteriosclerosis, 1 over seventeen years.



The following general statistical information relating to the ward service should be of interest: —

	Males.	Females.	Totals.	Percentage.
Average daily population . . .	886.41	1,091.96	1,978.37	100.00
In bed . . . . .	84.59	87.51	172.10	8.69
In restraint . . . . .	3.26	2.28	5.54	.27
In seclusion . . . . .	3.24	13.94	17.18	.86
Eating in dining rooms . . .	778.87	853.85	1,632.72	82.53
Eating on wards . . . . .	107.54	238.11	345.65	17.47
Fed by nurses . . . . .	22.92	37.50	60.42	3.05
Idle . . . . .	397.86	578.31	976.17	49.34
Employed . . . . .	488.55	513.65	1,002.20	50.66
Parole of grounds . . . . .	149.85	54.17	204.02	10.31
Out for exercise . . . . .	750.28	671.16	1,421.44	71.84
Noisy . . . . .	45.78	131.42	177.20	8.95
Violent . . . . .	.60	33.17	33.77	1.71
Destructive . . . . .	2.55	36.67	39.22	1.98
Soiled or wet . . . . .	44.58	154.80	199.38	10.08
Taking medicine . . . . .	13.68	28.39	42.07	2.13
Infirm . . . . .	313.70	377.93	691.63	34.96

The percentages shown in the above table represent the average daily number in each instance for the entire year, thus: the average daily number of patients in bed was 172.10, or 8.69 per cent of the average daily population, and the average daily number out for exercise was 1,421.44, or 71.84 per cent of the average daily population. The table shows an unusually large percentage of our population to consist of bed cases. As has already been explained, this is largely due to the fact that the senile and infirm cases cannot readily be removed to institutions outside of the metropolitan district, and come to the Boston State Hospital. The hospital has, for this reason, an infirmary class approximating 30 per cent of the total number of cases cared for. The number of patients in restraint and seclusion, as shown by the above table, although small, is due in part to the fact that there has been such an unfortunate shortage of nurses and attendants. If the percentage of infirm cases is eliminated (and this, of course, includes the bed patients), the average daily number going out for exercise must

be looked upon as quite large. The average daily number of noisy patients is of considerable interest. The number of patients actually violent is not at all consistent with the popular ideas regarding institutions of this type. The number of patients actually employed in useful occupations should not be looked upon as small if the percentage of bed cases is taken into consideration. The number actually taking medicine would be considerably smaller if it were not for the senile and infirm population.

#### GENERAL HEALTH OF THE HOSPITAL.

The general health of the hospital has been very satisfactory during the past year. There were no serious epidemics of any kind. Twenty cases of enteritis of a mild type were reported from various wards and buildings in October. The nature of the infection could not be determined. There were a few scattering cases of influenza during the months of February and March. These included four nurses and attendants and 34 patients. No further cases developed after the first of April. The disease, as a rule, assumed a mild form and there were no deaths.

There was the usual number of minor accidents and injuries in the wards of the hospital throughout the year. All of these were thoroughly investigated and reported in the usual manner to the Board of Trustees and the Department of Mental Diseases. There were, however, no homicides or suicides.

The number of deaths occurring during the year is shown on page 7 and the autopsy rate is given in the report of the pathological laboratory for the year.

#### EMPLOYEES.

The problem of maintaining an adequate force of employees in the hospital has not been so serious as it was during the preceding year. On Sept. 30, 1921, there were 386 persons in the employ of the hospital. During the year 656 were appointed, 627 resigned and 29 were discharged. Ten hundred and forty-two persons occupied 435 positions, — a rotation of 2.39. The average daily number of employees during the year was 393.69, with 8.77 per cent of vacancies. The average daily number in the ward service was 226.86, with 10.94 per

cent of vacancies. The ratio of ward employees was 1 to 8.73 patients, and of all employees, 1 to 5.05. Although this represents a slight improvement over the past year, the shortage, especially in the ward service, has been such as to interfere somewhat with the efficient and proper care of patients. This has affected the medical service in various ways. Less patients have been employed and there has been more restraint and seclusion than would be needed ordinarily. The lack of ward supervision, moreover, has resulted in a destruction of clothing and other ward supplies that is of considerable importance from a financial point of view. The limited number of nurses and attendants has, of course, materially interfered with our ability to satisfactorily handle the large number of visitors calling at the hospital to see their relatives and friends. The total number of visits made to the patients during the last year was 58,936. We often have 500 or 600 visitors during one day, the highest number on any one day during the year being 992. The decrease in the number of nurses is, of course, a material factor in increasing accidents, injuries and escapes. At the present time there is much less difficulty in obtaining the services of male employees. It is still hard, however, to maintain an adequate force of female nurses and attendants. This is due, doubtless, in part, to the fact that the hours of duty are long, and association with mental cases is not attractive to those who are not familiar with this line of work. This is a problem, however, which has affected the general hospitals as much as it has the institutions for mental diseases. Under the circumstances, if an increased compensation is not possible for ward employees, certainly no reduction should be contemplated. One of the factors which has interfered with our maintenance of an adequate force of ward employees heretofore has been the lack of comfortable living quarters. The occupancy of the new nurses' home in the East Group has remedied this situation in a way which has already been productive of definite results. At the present time we are unable to properly house male ward attendants. The employees' cottage occupied by men has a capacity of only 42. Our quota of male attendants is 110. It has been necessary for them to be quartered in attics and in many other places which are far from being desirable. We are badly in need of a new

building for male ward attendants. We have no satisfactory place for employees engaged in outside work. The old farmhouse in the West Group, which furnishes quarters for only 19 persons, is in such a condition that it should be torn down and replaced as soon as possible. There has always been difficulty in inducing our employees to live in it. The fact that our male attendants have been scattered around in so many different places has, of course, made it difficult to keep them under proper supervision.

The shortage of staff quarters is also a serious matter which should be remedied as soon as the cost of construction will permit. Various officers and employees assigned to the East Group have from time to time been compelled to live in buildings in the West Group, nearly a mile away.

#### THE MEDICAL SERVICE.

The following changes have taken place in the medical service during the year. Dr. Rebekah B. Wright, who has been hydrotherapist at the hospital for some time, resigned on Dec. 31, 1921, to accept a position with the Department of Mental Diseases for the purpose of making a survey of hydrotherapy in the various State hospitals. Dr. Ralph M. Putnam, who was appointed assistant physician on Dec. 15, 1921, resigned on August 9. Dr. Frederick H. Gebhardt, who was appointed assistant physician on Oct. 27, 1921, resigned on Jan. 6, 1922. Dr. Anna E. Steffen was appointed assistant physician on Jan. 15, 1922. Dr. Steffen received the degree of A.B. from Oberlin College in 1912 and was graduated from Tufts Medical School in 1918. She was interne at Long Island Hospital for two years and also served for some time as assistant medical director in the municipal court. Dr. Shichi Uyematsu, whose appointment as pathologist was noted last year, resigned on March 18, 1922, and returned to Japan. Dr. Roy D. Halloran was appointed assistant physician on April 1, 1922. He received the degree of A.B. at Dartmouth College in 1917 and was graduated from the college of Physicians and Surgeons in New York City in 1920. He served for a year and a half as interne at the Newark City Hospital, Newark, N. J. Dr. Alberta S. B. Guibord, who has for some time served as psychiatrist to the Church Home Society of Boston, was ap-



pointed assistant physician on April 17, 1922, and detailed to act as the hospital's representative in the mental examination of children in the public schools under the supervision of the Department of Mental Diseases. Dr. Roderick B. Dexter, who was appointed assistant physician May 23, 1917, and promoted to the position of senior assistant physician on June 1, 1920, resigned on November 30 to accept an appointment as assistant superintendent at the Taunton State Hospital. Dr. Albert Evans of Boston was appointed consulting physician on May 15, 1922.

Staff meetings have been held as usual during the year, alternating between the East and West groups. Efforts have been made to present all new admissions at staff meetings, as well as cases about to leave the hospital on visit or cases to be discharged.

The surgical work of the hospital has been largely in the charge of Dr. Irving J. Walker of Boston, who visits the hospital regularly and has performed several operations. The following is a summary of the more important surgical work of the year, including cases sent to the City Hospital for operation at that place: —

Amputation of left breast . . . . .	1
Amputation of right breast . . . . .	1
Appendectomy . . . . .	1
Carcinoma of breast . . . . .	1
Carcinoma of stomach . . . . .	1
Curetment of right side of face . . . . .	1
Exploratory laparotomy, with drainage . . . . .	1
Hysterectomy and removal of tumor . . . . .	1
Incision, and drainage of bladder . . . . .	1
Incision, and drainage of left thigh . . . . .	1
Incision, and drainage of neck . . . . .	1
Removal of carbuncle from back of head . . . . .	1
Removal of tumor of left breast . . . . .	1
Purulent peritonitis . . . . .	1

#### OUT-PATIENT SERVICE.

The work of the out-patient department of the hospital, includes the supervision of patients in family care, those at home on visit, the after care of cases discharged from the custody of the hospital, and medical advice given to numerous persons

who visit the hospital for the purpose of consulting members of the staff on matters pertaining to their own welfare or that of their family or relatives. The patients who have been allowed to go home on visit, or who have left the hospital temporarily for family care, are visited at frequent intervals by the social service workers of the hospital. Patients who are at home on visit are also required to present themselves at the hospital at regular intervals for observation. Considerable supervision is also given to former patients who have been discharged but who are kept under observation by the social workers and the physicians. Some cases appearing for consultation are accepted as voluntary patients. Others are referred to their family physicians or to the Boston Psychopathic Hospital. The following is a report of the movement of population of patients under the supervision of the out-patient department:—

	Males.	Females.	Totals.
In family care Sept. 30, 1921 . . . . .	—	8	8
On escape Sept. 30, 1921 . . . . .	2	—	2
On visit Sept. 30, 1921 . . . . .	103	165	268
Dismissed to family care during the year . . . . .	1	9	10
Escaped during the year . . . . .	30	11	41
Dismissed on visit during the year . . . . .	1,310	808	2,118
Admitted from family care . . . . .	—	4	4
Admitted from escape . . . . .	20	9	29
Admitted from visit . . . . .	1,230	700	1,930
Admitted from family care and discharged . . . . .	—	—	—
Admitted from escape and discharged . . . . .	3	—	3
Admitted from visit and discharged . . . . .	85	103	188
In family care Sept. 30, 1922 . . . . .	1	13	14
On escape Sept. 30, 1922 . . . . .	9	2	11
On visit Sept. 30, 1922 . . . . .	98	170	268



## SOCIAL SERVICE DEPARTMENT.

The following is a summary of the social service work done during the year under the direction of Miss Marie L. Donohoe:—

	Males.	Females.	Totals.
Total number of cases considered during the year:	577	657	1,234
(a) New cases . . . . .	169	192	361
(b) Renewed cases . . . . .	63	119	182
(c) Continued cases . . . . .	188	234	422
(d) Outside cases . . . . .	—	4	4
(e) School clinic cases (new) . . . . .	157	108	265
Sources of new cases:			
(a) Referred by physicians . . . . .	128	138	266
(b) Referred by other agencies . . . . .	27	18	45
(c) Referred by friends or relatives . . . . .	—	6	6
(d) Referred by patient's own initiative . . . . .	—	—	—
(e) Selected by social worker . . . . .	14	30	44
(f) Referred by schools . . . . .	157	108	265
Purposes for which new cases were referred:			
(a) Medical history . . . . .	65	50	115
(b) Medical-social history . . . . .	20	20	40
(c) Investigation of home conditions . . . . .	17	63	80
(d) Social investigations . . . . .	43	86	129
(e) Special investigations . . . . .	82	87	169
(f) Supervision while at home (general) . . . . .	167	312	479
(g) Supervision while at home (special) . . . . .	25	151	176
(h) Family assistance . . . . .	61	70	131
(i) Employment . . . . .	25	33	58
(j) Family care department . . . . .	1	20	21
(k) School histories . . . . .	157	108	265
(l) Miscellaneous:			
Personal service and location of relatives . . . . .	68	71	139
Soldier cases . . . . .	113	—	113
Medical diagnoses of new cases:			
1. Traumatic psychosis . . . . .	1	—	1
2. Senile psychoses . . . . .	11	18	29
3. Psychoses with cerebral arteriosclerosis . . . . .	13	14	27
4. General paralysis . . . . .	21	6	27
5. Psychoses with cerebral syphilis . . . . .	5	—	5
6. Psychoses with Huntington's chorea . . . . .	—	—	—
7. Psychoses with brain tumor . . . . .	—	—	—
8. Psychoses with other brain or nervous diseases . . . . .	1	2	3
9. Alcoholic psychoses . . . . .	19	15	34
10. Psychoses with drugs and other exogenous toxins . . . . .	—	1	1
11. Psychoses with pellagra . . . . .	—	1	1
12. Psychoses with other somatic diseases . . . . .	2	8	10
13. Manic-depressive psychoses . . . . .	18	40	58
14. Involution melancholia . . . . .	3	8	11
15. Dementia praecox . . . . .	42	37	79
16. Paranoia or paranoid conditions . . . . .	4	13	17
17. Epileptic psychoses . . . . .	1	—	1
18. Psychoneuroses and neuroses . . . . .	2	3	5
19. Psychoses with psychopathic personality . . . . .	5	3	8
20. Psychoses with mental deficiency . . . . .	5	6	11
21. Undiagnosed psychoses . . . . .	11	7	18
22. Without psychosis . . . . .	5	10	15
Social problems in all cases:			
(a) Disease:			
Mental . . . . .	134	306	440
Physical . . . . .	18	36	54
(b) Poverty . . . . .	49	68	117
(c) Environmental problems . . . . .	12	76	88
(d) Sex problems . . . . .	—	15	15
(e) Educational problems . . . . .	24	84	108
(f) Employment problems . . . . .	45	83	128
(g) Family problems . . . . .	47	145	192
(h) Legal problems . . . . .	—	—	—
(i) Moral problems . . . . .	1	28	29
(j) Criminality . . . . .	2	4	6
(k) Unclassed . . . . .	23	17	40
(l) No social problem . . . . .	55	10	65
(m) School problems . . . . .	157	108	265

	Males.	Females.	Totals.
Nature of service rendered in all cases:			
Arrangements made for hospital or medical care (number of cases)	8	20	28
Arrangements made for occupational therapy	5	24	29
Arrangements made for nursing service	—	1	1
Arrangements made for readjustment:			
(a) Home	16	100	116
(b) Work	20	57	77
(c) Recreation	3	33	36
(d) Church	—	2	2
Arrangements made for community supervision (number of cases)	192	463	655
Number of cases referred to relief agencies	15	12	27
Referred to special agencies	63	13	76
Referred to venereal disease clinics	—	—	—
Referred for follow-up work (Psychopathic Hospital)	—	—	—
Referred to employment agencies	22	22	44
Educational work:			
Hygiene	22	42	64
Industry	7	17	24
School	—	12	12
Home making	—	4	4
Medical histories obtained	65	50	115
School histories obtained	157	108	265
Investigations only	59	47	106
Legal aid secured or advised (number of cases)	60	13	73
Advice to patients	62	144	206
Advice to relatives	84	173	257
Family work	35	87	122
Miscellaneous: personal service, relatives located, etc.	31	57	88
Total number of visits	768	1,857	2,625
To patients on ward	109	213	322
To patients in community	180	622	802
To relatives of patients	318	676	994
To other agencies	161	346	507
School clinics:			
Histories taken	157	108	265
Boarding patients:			
Patients visited during the year	1	19	20
Patients placed during the year	1	9	10
Patients replaced during the year	—	—	—
Patients returned to hospital	—	4	4
Boarding homes investigated	—	5	5
Disposition of social cases:			
Cases discharged during the year	112	119	231
Cases to be continued	215	249	564
Cases closed	77	65	142
School clinic cases closed	157	108	265
Cases in care of other hospitals	16	—	16
Cases in care of other agencies	—	—	—
No action taken	—	—	—

The personnel of the social service department now consists of three paid workers, — a head social service worker and two assistants. During the greater part of the time we have also had the services of several students. This has enabled the social service department to cover a much wider field. The number of workers should, however, be increased and higher salaries rendered available.

## PATHOLOGICAL LABORATORY.

The routine work of the pathological laboratory may be summarized as follows: —

Autopsies . . . . .	89
Blood examinations:	
Cell count, red . . . . .	37
Cell count, white . . . . .	40
Cell count, differential . . . . .	35
Hemoglobin . . . . .	1
Cerebrospinal fluid examinations . . . . .	65
Cerebrospinal fluid examinations, post mortem . . . . .	1
Microscopic sections, number of cases . . . . .	39
Milk examinations:	
Bacteriological . . . . .	10
Butter fat . . . . .	11
Smears, autopsy . . . . .	15
Smears, miscellaneous . . . . .	26
Sputum examinations . . . . .	53
Urinalyses . . . . .	646
Vaccine, autogenous . . . . .	1
Wassermann reactions:	
Blood serum . . . . .	487
Cerebrospinal fluid . . . . .	75
Cerebrospinal fluid, post mortem . . . . .	3
Neurosyphilis treatments . . . . .	198
Number of cases treated . . . . .	21

The number of deaths in the hospital during the year was 259, of which 89 came to autopsy, making the autopsy percentage for the year 34.36.

The following table shows the psychoses represented in cases coming to autopsy: —

Traumatic psychosis . . . . .	1
Senile psychoses . . . . .	13
Psychoses with cerebral arteriosclerosis . . . . .	32
General paralysis . . . . .	19
Psychoses with other brain or nervous diseases . . . . .	4
Alcoholic psychosis . . . . .	1
Psychoses with other somatic diseases . . . . .	3
Manic-depressive psychoses . . . . .	2
Involution melancholia . . . . .	3

Dementia præcox . . . . .	8
Paranoia or paranoid conditions . . . . .	2
Epileptic psychosis . . . . .	1
<hr/>	
Total . . . . .	89

In the following table the causes of death of these cases are shown:—

Acute enterocolitis . . . . .	4
Bronchopneumonia . . . . .	9
Pulmonary tuberculosis . . . . .	8
General paralysis . . . . .	14
Lobar pneumonia . . . . .	5
Chronic myocarditis . . . . .	6
Caseous pneumonia . . . . .	1
Chronic interstitial pneumonia . . . . .	1
Arteriosclerosis . . . . .	15
Volvulus . . . . .	1
Empyema . . . . .	2
Chronic interstitial nephritis . . . . .	3
Cerebral hemorrhage . . . . .	3
Exhaustion from dementia præcox . . . . .	1
Acute purulent pericarditis . . . . .	1
Contracted kidney . . . . .	1
Acute cerebrospinal meningitis . . . . .	1
Erysipelas . . . . .	1
Acute diffuse peritonitis following spontaneous perforation of urinary bladder and necrosis . . . . .	1
Septicemia with gangrenous duodenum . . . . .	1
Status epilepticus . . . . .	1
Coronary sclerosis with occlusion . . . . .	1
Mitral stenosis . . . . .	1
Arteriosclerotic gangrene . . . . .	1
Acute bronchitis . . . . .	1
Tubercular peritonitis . . . . .	1
Acute infectious colitis . . . . .	1
Exhaustion from chronic gastritis . . . . .	1
Chronic enteritis . . . . .	1
Chronic interstitial myocarditis . . . . .	1
<hr/>	
Total . . . . .	89

#### DENTISTRY.

The dental work of the hospital has been carried on actively during the last year by the resident dentist, Dr. Lawrence H. Stone. The following is a summary of the work of this department:—

Abscesses treated . . . . .	92
Bridges . . . . .	5
Cleanings . . . . .	2,454
Crowns . . . . .	1
Examinations . . . . .	1,039
Fillings . . . . .	1,418
Inlays . . . . .	1
Miscellaneous . . . . .	96
Plates . . . . .	10
Plates repaired . . . . .	2
Roots extracted . . . . .	1,187
Teeth extracted . . . . .	1,132
Teeth treated . . . . .	43
Patients treated . . . . .	2,962

### HYDROTHERAPY.

The hydrotherapeutic work of the hospital has been carried on as usual in the East and West groups. Systematic instruction has been given to the members of the nurses' training school in this work, as well as attendants. The following hydriatric treatments were administered during the year: —

Wet sheet packs . . . . .	365
Salt glows . . . . .	154
Neutral saline baths . . . . .	152
Sitz baths . . . . .	24
Cabinet vapor baths . . . . .	46
Hot and cold to spine . . . . .	30
Swedish shampoos . . . . .	13
Tub shampoos . . . . .	276
Foot baths as preparatory treatments . . . . .	433
Needle sprays . . . . .	1,476
Fan douches . . . . .	422
Jet douches . . . . .	249
Fomentations . . . . .	3
Hot and cold to hand . . . . .	12

Nine hundred and ten packs were given during the year and 2,852 continuous baths, making the average daily number of packs 2.49, and the average daily number of continuous baths 7.80.



## TRAINING SCHOOL FOR NURSES.

The work of the training school for nurses has been carried on very successfully by the superintendent of nurses, Miss Mary Alice McMahon, R.N., during the year just ended. The affiliation of our school with that of the Boston City Hospital has been a very advantageous arrangement to us, each nurse spending twelve months at that institution acquiring a familiarity with general hospital work, which is a valuable supplement to the instruction given here. The graduating exercises of the training school for nurses were held on Wednesday evening, June 21, at the chapel in the East Group. The address of the evening was delivered by Dr. Henry Lefavour, chairman of the Board of Trustees, and the diplomas were presented to the graduating class by Mrs. Katherine G. Devine. The following nurses completed the prescribed course of instruction and received their diplomas on that occasion: Helene Margaret Bonner, Margaret Josephine Curran, Mary Dynan, Jean Hazel Miller, Margaret Gillispie MacArthur, Rebecca Catherine MacDaniel and Mary Magdelene MacKinnon. The junior class for 1922-23 consists of 4, the intermediate class of 10, and the senior class of 4. Nine are now receiving their instruction for the intermediate year at the Boston City Hospital. Ten graduates of our training school are now employed in the wards of the institution. The difficulty of maintaining successful training schools for nurses in the State hospitals has been increasing gradually. This is due, probably, to the fact that the work of a nurse in caring for psychiatric cases is more difficult in many ways than that of those in the general hospitals. One of the primary purposes of nurses' training schools is the instruction of employees who are to care for the patients in our wards. While it is desirable to graduate nurses who are qualified to care for psychiatric cases in the community, that is not the question of paramount interest to us. Unfortunately, we are unable to retain our graduates, who, as a rule, leave almost immediately on the completion of their course of instruction to accept much more remunerative positions in other services, or to take up general nursing, which offers much greater financial rewards. If the standards of our hospitals are to be maintained we must have more graduate nurses. To accomplish this it will be necessary to offer a higher rate of



pay to graduate and charge nurses. The systematic instruction of attendants, both male and female, is being carried on along the lines prescribed by the committee on training schools, representing the Department of Mental Diseases.

#### OCCUPATIONS AND INDUSTRIES.

Occupational work has been materially extended in the ward service during the year, and we now have three occupational therapists on duty in the West Group and one in the East Group. This work at the present time is under the very efficient direction of Miss Frances E. Wood, who was for a number of years connected with the Devereux Mansion at Marblehead. It is hoped that several more workers can be added during the coming year, as the field cannot be covered properly by the number now employed. It has been found difficult to obtain occupational therapists at the rate of pay authorized, as better inducements are offered in other States. A systematic attempt has been made to interest in occupations of some kind as many patients in the wards as can be employed under existing circumstances, and who are unable for any reason to go to the industrial room. Occupational work has been carried on during the year in buildings A, B, C and D in the East Group, and buildings A, B, C and D in the West Group. This consists of basketry, rug making, weaving, lace making, embroidery, knitting, crocheting, sewing, mending, furniture repairing, woodwork, simple bookbinding, tin work, cord work and drawing. There is an average of about 21 patients occupied in the male wards daily, and about 187 in the female wards. An important feature of the ward work is the special effort made in the re-education of the deteriorated cases. This consists in a systematic course of instruction, which includes simple and graded exercises and games, and work such as raveling burlap, tearing rags, braiding rags, untangling bright colored wools, sorting bright colored wools, winding into balls, winding into skeins, cutting to a line, sewing pierced picture cards with bright colors, sewing rug strips, knitting and crocheting, plain sewing, fancy sewing and rug making, — all of these in regular progression. A permanent exhibit covering the work of the occupational and industrial therapy departments may be seen in the C building of the West Group.

The following summary of the articles produced by the occupational classes during the year will serve as an illustration of the various lines of activity in the daily routine in the wards:—

*Male Patients.*

Baskets . . . . .	131
Belts . . . . .	2
Book racks . . . . .	6
Boxwood furniture . . . . .	20
Cans painted . . . . .	48
Card files . . . . .	5
Chairs caned . . . . .	16
Checker boards . . . . .	21
Coat hangers . . . . .	158
Designs . . . . .	63
Desk blotters . . . . .	28
Desk files . . . . .	26
Fly swatters . . . . .	17
Index card sets . . . . .	3
Key cords . . . . .	359
Lamp shades . . . . .	5
Picture puzzles . . . . .	7
Rings for ring-toss . . . . .	60
Rugs woven . . . . .	53
Slippers . . . . .	6
Tie . . . . .	1
Toys . . . . .	50
Window wedges . . . . .	116
Woven runner . . . . .	1
Miscellaneous work:	
Furniture repairing.	
Raveling.	
Sandpapering.	
Sorting (string and reed).	
Spool knitting.	
Tags . . . . .	4,408

*Female Patients.*

Aprons . . . . .	10
Bags . . . . .	23
Bandages and dressings . . . . .	949
Baskets . . . . .	27
Bean bags . . . . .	19
Bed socks (pairs) . . . . .	159
Bibs . . . . .	3
Cleaning cloths, knitted . . . . .	72

Crocheting:	
Yokes . . . . .	21
Medallions . . . . .	9
Curtains (pairs) . . . . .	58
Doilies . . . . .	213
Door pads . . . . .	49
Drawings . . . . .	17
Dust cloths . . . . .	25
Face cloths . . . . .	503
Guest towels . . . . .	34
Hats . . . . .	62
Holders . . . . .	1,360
Hot-water bag covers . . . . .	7
Mittens (pairs) . . . . .	14
Napkins . . . . .	122
Penwipers . . . . .	5
Petticoats . . . . .	618
Pillow cases . . . . .	2,318
Pillow covers . . . . .	2
Pin cushions . . . . .	5
Quilt blocks . . . . .	258
Rugs . . . . .	70
Runners . . . . .	304
Sheets . . . . .	4,177
Stand covers . . . . .	26
Suspenders . . . . .	933
Towels . . . . .	4,463
Xmas bags . . . . .	1,454
Xmas cards . . . . .	20
Miscellaneous work:	
Crocheting lace (yards) . . . . .	76 $\frac{1}{4}$
Lace (yards) . . . . .	100
Mending:	
Garments . . . . .	190
Socks (pairs) . . . . .	711
Preparing rug material (pounds) . . . . .	789
Pulling threads.	
Raveling.	
Quilt blocks . . . . .	47
Spool knitting (yards) . . . . .	12,385 $\frac{1}{4}$
Straw braid for hats (yards) . . . . .	211
Worsted sorted and wound.	

The estimated value of articles produced in the wards during the year was \$1,431.25.

A new and highly important development during the year has been the establishment of an occupational center for mental

cases that have improved to such an extent as to warrant their leaving the hospital and taking up a residence in the community, in a place where they can be under competent supervision until they have succeeded in readjusting themselves to their environment and are able to return to their own homes or support themselves. The key to this process of readjustment would appear to be the resumption of occupational interests. With this object in view a community center was established at Hopkinton during the summer under the direction of Miss Donohoe, the head social service worker of the hospital. Competent occupational instruction has been provided for. It promises at this time to be a successful undertaking which may point the way to an entirely new line of treatment for mental cases. The work of this center, which has been officially designated "the occupational therapy center for mental patients," has been made possible by contributions from private sources.

Industrial work for women in the East Group consists of basketry, rug making, weaving, lace making, embroidery, knitting, crocheting, sewing, mending, etc. About 100 patients are occupied daily in the industrial rooms. The estimated value of the articles made in the East Group industrial room during the year was \$5,248.30. The industrial work for men is carried on entirely in the basement of Building B in the West Group. This work includes shoe repairing, the manufacture of various kinds of brushes, brooms, coat hangers, hats and various other articles. The value of articles produced during the year is estimated at \$12,831.45. The articles produced in the occupational and industrial departments of the hospital for the year represented a total valuation of \$19,511.

#### AGRICULTURAL ACTIVITIES OF THE YEAR.

The agricultural work of the institution has been carried on very efficiently during the past year under the direction of Mr. Lawrence Olsen. Owing to the number of employees available, the unfavorable weather, etc., the farm production for the year has not been as satisfactory as we had hoped it would be. There was a total of 145 acres under cultivation. This consisted of 26 acres devoted to field crops and 25 to gardening, in addition to which there were 89 acres of meadowland and 5 of

orchards and small fruits. The estimated value of farm products during the year was \$9,256.45.

I wish to call attention again to the question of purchasing a farm for the hospital. The hospital site consists of only 232 acres. The forty buildings belonging to the institution take up a large amount of this space and leave but comparatively little land for farming and gardening. It should be remembered that a considerable amount of land is necessary for the recreation of patients. The present development of the hospital does not leave much room available for farming, nor is it possible to purchase any more land in this vicinity at any reasonable cost. The report of the agricultural expert of the Department of Mental Diseases, as has been noted previously, shows that an institution of the size of the Boston State Hospital should cultivate approximately 700 acres of land. The advisability of purchasing several hundred acres of farm land within ready reach of the hospital is worthy of serious consideration. The per capita cost of maintenance would be materially lowered if a farm colony could be established and extensive agricultural work carried on at some place not too distant. The increasing number of buildings has reduced the amount of space available for gardening purposes. If we could establish a farm in the country, it would be possible for us to maintain a dairy, raise poultry and furnish garden products at a considerable saving. Farm and gardening activities cannot be carried on on a hospital site so limited in size and located, as this one is, in a large city.

#### FINANCIAL STATEMENT.

The Legislature made the following appropriations for new construction during the session of 1922: verandas, C building, East Group, \$8,000; verandas, G building, East Group, \$5,000; bakery building, \$36,000; addition to refrigerating plant, \$23,000.

The maintenance appropriation for the year was \$727,400. The maintenance expenditures of the hospital for the year were as follows:—



	Amount expended.	Per Capita.	Percentage of Total.
Personal services . . . . .	\$300,848 18	\$149.465	42.17
Travel, transportation and office expenses . . . . .	9,480 56	4.710	1.33
Food . . . . .	169,597 95	84.258	23.77
Religious instruction . . . . .	2,080 00	1.033	.29
Clothing and materials . . . . .	27,324 38	13.575	3.85
Furnishings and household supplies . . . . .	44,728 94	22.222	6.27
Medical and general care . . . . .	18,614 25	9.247	2.61
Heat, light and power . . . . .	74,852 57	37.187	10.49
Farm and stable . . . . .	7,755 69	3.853	1.08
Grounds . . . . .	9,977 60	4.957	1.39
Repairs, ordinary . . . . .	20,630 62	10.250	2.89
Repairs and renewals . . . . .	27,546 28	13.686	3.86
Total . . . . .	\$713,437 02	\$354.443	100.00

Based on the average daily population of the hospital (2,012.83), the per capita cost of maintenance for the year was \$354.44, or \$6.816 per week. The per capita cost for the year 1921 was \$406.76, or \$7.82 per week. Owing to the fact that the cost of commodities in general has not yet returned to normal, or at least to a pre-war basis, the cost of maintenance is still much higher than formerly. The fact that the hospital has a larger infirmary population and a greater number of bed patients than other institutions of this type is, of course, a factor of material importance. Our lack of agricultural facilities and the absence of a dairy mean a considerable increase in the cost of maintenance. The type of buildings erected heretofore has been a material factor in the cost of personal services as well as in the outlay necessary for repairs. The old buildings erected many years ago were made up of small units, few dormitories accommodating more than six patients, and consisting largely of single rooms. This necessitates a large amount of supervision and a number of ward employees that could be avoided just as well as not in certain buildings where custodial care only is required, and more patients can be housed in larger dormitories. No buildings designed exclusively for purely custodial patients in considerable numbers have ever been erected at this institution. The cost of maintaining the old buildings erected many years since by the city of Boston has, of course, been very high.

## GENERAL OPERATIONS FOR THE YEAR.

The East Group kitchen and dining-room building, which, as has been shown, was first occupied on March 18, 1921, has reached a very satisfactory state of efficiency. Each of the dining rooms on the upper floor accommodates 224 women, and there are accommodations for 112 men from the West Group in the dining room on the first floor. The nurses' dining room seats 64 and the employees' dining room 52.

The West Group kitchen and dining-room building, which was opened on Oct. 20, 1921, includes three dining rooms for men, seating 224 each, a nurses' dining room which accommodates 112, and a dining room for other employees which seats 44 persons.

The kitchens have been equipped with special insulated food containers which have made it possible to deliver food at all the other dining rooms and buildings in such a way that it can be served while still hot.

The reception rooms in both the East and West Group nurses' homes have been equipped with some very attractive furniture made in our own industrial rooms. Each nurse's room is furnished with waste paper baskets, rugs and other articles also made in our industrial departments.

The new verandas for the C and G buildings in the East Group were completed and ready for use in September, 1922, and have added a great deal to the efficiency of the buildings in question and contributed very much to the comfort of the patients, who are now afforded an ample opportunity for getting fresh air and a limited amount of exercise at all times.

The new bakery building, which is located in the rear of the storehouse in the East Group, was completed during the month of September. It is 100 by 42 feet in size, and includes three Petersen ovens of the latest model, a space for flour storage, a proving room, bread room, refrigerator, lockers for the clothing of the employees working in the building, shower baths, etc. The equipment also includes the latest type of dough and cake mixers.

An addition to the power house, which will furnish space for a new ice plant and the necessary refrigerating machinery, was completed in September, 1922. The equipment was being installed as the fiscal year ended. Metal lockers for the use of the firemen have been installed in the boiler house.

The completion of the kitchen and dining-room building in the West Group has made it possible to remodel the basement of the administration building in that group. A new and very satisfactory staff kitchen has been arranged for at that place.

The two-story addition to the laundry building, for which money was appropriated last year, was completed during the summer months. A new washer, a drying tumbler and a flat-work ironer have been purchased and will be installed shortly. This addition to the laundry building will furnish us with new receiving and sorting rooms 28 by 35 feet in size. This will make it possible to devote the two rooms in the old laundry building to washing, drying and ironing exclusively. The new machinery installed will be operated on an alternating instead of a direct current as before.

The new construction of the last few years has left us with a large amount of grading to be done. It will not be possible for us to complete this work for some time, although much progress has been made. The landscape work made necessary by the filling in of the old pond in the East Group has been pushed as rapidly as possible, and we hope to have it completed in the early part of next year. The grading and landscape work in the neighborhood of the nurses' home has been practically completed, and we have made good progress on the grading around the kitchen and dining room in the East Group.

The East Group nurses' home has been connected with the neighboring buildings by a cement walk.

The work of filling in the site between Morton Street and the power house, storehouse, etc., in the East Group has been carried on as rapidly as possible during the summer, and should be finished next year.

It has been necessary to install a new tar and gravel roof on the mortuary building in the East Group.

The old wooden shingle roof on the administration building in the East Group was removed during the summer and replaced by asphalt shingles. The new asphalt shingle roof on the chapel and the adjoining corridors in the East Group was completed in July.

The old greenhouses in the East Group, which were in a very dilapidated state and almost ready to fall down, were thoroughly overhauled and repaired during the summer.

The East B building was equipped with fly screens during the year.

The E building and the lower floor of the F building in the East Group have been repainted.

Owing to the necessity of a new ceiling in Ward 1 of the East G building, Ward F-1 was opened in September as a temporary reception ward for women.

Work on the new ceiling in the G building referred to above was practically completed at the end of the year.

A mezzanine floor has been built in the East Group storehouse which has practically doubled the capacity of that place.

The East Group kitchen was painted for the first time during the summer. A stairway connecting the scullery in the East Group kitchen building with the basement beneath it was finished recently. This will make it possible for us to practically double the scullery space in the building in the near future.

The branch of Stony Brook running from the Forest Hills Cemetery across Canterbury Street and through part of the hospital property in the West Group was partially enclosed in a 30-inch Akron pipe conduit during the summer. This will make it possible for us to do some much needed grading and filling later.

The east wing of the B building in the West Group was repainted during the year, as well as the rooms and corridors of the administrative section of that building.

A new asphalt shingle roof on the C and D buildings in the West Group, together with the connecting corridors, was completed during the summer months.

All the equipment necessary was purchased for the operating room in the F building in the West Group and installed in September.

The 6-inch steam line running from the G building in the West Group, in the rear of the F building, to the E cottages was reinsulated during the summer with 8-inch magnesia pipe covering. This practically completes the reinsulation of the West Group steam lines.

The old congregate dining room in the rear of Building F in the West Group was thoroughly renovated and repainted during the year and was opened in October as an employees' club house. This is something which has been very badly needed for



years, but we have heretofore had no space available for such purposes. An employees' club has been organized and a great deal of interest and enthusiasm has been shown by the nurses and attendants. Several entertainments have been given and a considerable amount of money raised by the employees to be expended in the equipment of the building. We are indebted to some unknown donor who presented the hospital with a grand piano during the summer. This is a gift which has been very highly appreciated. We regret not being able to personally express our appreciation to those who were thoughtful enough to remember us in this way.

The Lieutenant Governor and five members of the Executive Council visited the hospital on February 15 and made a very thorough inspection of various wards and buildings.

Col. John F. J. Herbert and Mr. Powers, representing the Veterans' Bureau, also visited the hospital on March 8 and personally interviewed practically all of the ex-service men in the institution.

The usual visits have been made during the year by representatives of the Department of Mental Diseases and the legislative committee on public institutions.

The annual field day exercises of the hospital were held on the baseball grounds in the West Group on July 11, and were thoroughly appreciated by the patients, many of whom participated in the various events. We are indebted to the Jewish Home on Canterbury Street for the excellent music furnished on that occasion.

Attention should be called again to the desirability of acquiring the 150,000 square feet of land belonging to the Forest Hills Cemetery and located south of Canterbury Street, adjoining the West Group. This is the only part of the site bounded by Canterbury Street on the north, Harvard Street on the south, Morton Street on the east, and Walk Hill Street on the west that has not as yet been acquired by the State. The buildings on this land could be used to very good advantage and would facilitate the removal of the barns and other objectionable structures adjoining the administration building in the East Group. The desirability of acquiring this land was referred to by the joint special legislative committee on public institutions in their report of March, 1920, as shown in Senate Document No. 450.



Further reference should be made at this time to the Canterbury branch of Stony Brook. Although the channel of this brook was cleaned out by the city three years ago, it is already overgrown with weeds and is as badly obstructed as ever. The brook not infrequently overflows its banks, and from 30 to 40 acres of hospital land have been covered with water at times. It occasionally gets into the steam conduits, and has flooded the pump room of the power house to a depth of a foot and a half. Such an overflow may at any time render it impossible to provide heat for the West Group, which now has a capacity of over 1,500 beds. This condition of affairs should be remedied as soon as possible. The conduit built by the city extends to the point where the brook enters the hospital property on Harvard Street. The brook runs through the grounds for a distance of approximately 4,500 feet. The conduit should be extended for at least 2,200 feet to the point where the hospital road crosses the brook in the West Group. This would reclaim 30 or 40 acres of valuable land, worth approximately \$260,000. The work of enclosing this brook as originally undertaken by the city is incomplete, and the present condition was intended only as a temporary arrangement. The joint special committee of the Legislature reporting on public institutions in 1920 referred to this as a serious matter requiring immediate attention.

#### NEEDS OF THE HOSPITAL FOR THE COMING YEAR.

The following items relating to construction deemed necessary for the coming year were submitted some time since to the Department of Mental Diseases: —

1. Administration building and staff quarters . . . . .	\$160,000
2. Superintendent's house . . . . .	20,000
3. Addition to garage . . . . .	2,950
4. Extension to sewer, water and steam lines . . . . .	12,000
5. Cottage for twenty farm employees . . . . .	26,000
6. Concrete platform for coal storage . . . . .	5,000
7. New greenhouse . . . . .	1,570
8. Concrete pavement in front of power house . . . . .	9,000
	<hr/>
	\$236,520

1. *Administration Building and Staff Quarters.* — The offices of the institution are now located in an old building purchased by the city of Boston about fifty years ago for use as an alms-

house. This is a two and one-half story building constructed of wood throughout, contains numerous exposed electric wires, and has several wooden stairways running from the basement to the attic. This building is located within 50 yards of a large wooden barn containing hay, and is surrounded by other non-fireproof structures, the nearest being the chapel and a building occupied by patients. Its presence in this location is a serious menace, and in case of fire would threaten the loss of the entire East Group. The building now houses over 50 employees, 30 of whom are living in the attic. The offices of the hospital should be in a central location. It is very inconvenient for relatives and friends of the patients to come from Walk Hill Street to the present administration building. The hospital has now reached a stage of development where an administration building is urgently needed. We do not propose to demolish the old wooden building now used for office purposes, but suggest removing it to other locations where it can be remodeled and used for housing employees, etc. In erecting an administration building we propose to provide additional accommodations for the staff on the second floor. Attention should be called to the fact that no new construction has ever been provided at the institution as yet for the exclusive use of the medical officers of the hospital.

2. *Superintendent's House.* — No superintendent's residence has ever been built at the hospital. The only house used for that purpose was the remodeled Pierce farmhouse, acquired by the city in 1893. This building is now being used for other purposes. The arrangement of the building is not such as to render it suitable for a superintendent's residence. It has been necessary for the Board of Trustees to rent a house for the superintendent. The lease on this house will expire by the time a building can be erected on the hospital premises. The annual outlay involved in this rental, including heat, light, etc., represents the interest on a considerable investment. The cost may be increased at the expiration of the present lease.

3. *Addition to Garage.* — No garage has ever been built for the hospital. We are using the old West Group boiler house, remodeled for this purpose, at the present time. It is, however, not large enough, and additional space is badly needed.

4. *Extension to Sewer, Water and Steam Lines.* — When a new administration building is erected an extension to the sewer,

water and steam lines of the institution will be necessary. Provision should be made for this at as early a moment as possible. When completed, this extension will also provide for several other buildings.

5. *Cottage for Twenty Farm Employees.* — Attention has already been called to the necessity of further provision for the housing of farm employees. The building now used for this purpose in the West Group is one which has been in constant use since 1904. It has been remodeled throughout on several occasions and cannot be repaired further to good advantage. The building inspectors of the district police have refused to certify it for occupancy, and it should be replaced at the earliest possible moment.

6. *Concrete Platform for Coal Storage.* — The recommendations of the consulting engineers representing the Department of Mental Diseases show that we should be able to take care of at least 6,000 tons of coal at one time. At present this is done by spreading the coal over a large space near the power house. This land is low and is frequently overflowed by water from the Canterbury branch of Stony Brook. A considerable loss would be prevented by storing this coal on a cement platform (20,000 square feet).

7. *New Greenhouse.* — The old greenhouse in the rear of the present administration building in the East Group is in a very undesirable location, as well as being inadequate to the needs of the institution. It should be replaced by a new and modern building in a different place.

8. *Concrete Pavement in Front of Power House.* — There is a granite block pavement in front of the laundry at the present time. This is not laid in cement and will have to be taken up soon. When relaid, this should be extended to the front of the power house and carried as far as the storehouse. The heavy trucks now delivering coal to the power house render the installation of some kind of a serviceable pavement necessary. The cheapest pavement available will be concrete, at an estimated cost of \$9,000.

Respectfully submitted,

JAMES V. MAY,  
*Superintendent.*

## VALUATION.

Nov. 30, 1922.

## REAL ESTATE.

Land (233 acres) . . . . .	\$576,680 00
Buildings . . . . .	2,688,195 20
	<hr/>
	\$3,264,875 20

## PERSONAL PROPERTY.

Travel, transportation and office supplies . . . . .	—
Food . . . . .	\$15,783 71
Clothing and materials . . . . .	23,390 94
Furnishings and household supplies . . . . .	217,070 73
Medical and general care . . . . .	1,775 13
Heat, light and power . . . . .	34,843 48
Farm . . . . .	14,465 75
Garage, stable and grounds . . . . .	3,366 20
Repairs . . . . .	7,572 17
	<hr/>
	\$318,268 11

## SUMMARY.

Real estate . . . . .	\$3,264,875 20
Personal property . . . . .	318,268 11
	<hr/>
	\$3,583,143 31

## TREASURER'S REPORT.

*To the Commissioner of the Department of Mental Diseases.*

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1922: —

### CASH ACCOUNT.

Balance Dec. 1, 1921 . . . . .	\$3,006 74
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### *Receipts.*

#### *Income.*

#### Board of inmates:

Private . . . . .	\$30,224 70	
Reimbursements, insane . . . . .	49,628 09	
		\$79,852 79

#### Personal services:

Reimbursement from Board of Retirement . . . . .	175 47
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#### Sales:

Travel, transportation and office expenses . . . . .	\$104 76	
Food . . . . .	665 19	
Clothing and materials . . . . .	46 68	
Furnishings and household supplies . . . . .	56 25	
Heat, light and power . . . . .	93 69	
Farm:		
Pigs and hogs . . . . .	\$117 35	
Hay . . . . .	375 00	
Sundries . . . . .	3 75	
		496 10
Repairs, ordinary . . . . .	9 75	
Repairs and renewals . . . . .	18 76	
		1,491 18

#### Miscellaneous:

Interest on bank balances . . . . .	\$657 38	
Interest on patients' funds . . . . .	143 79	
		801 17

82,320 61

### *Receipts from Treasury of Commonwealth.*

#### Maintenance appropriations:

Balance of 1921 . . . . .	\$23,366 39	
Advance money (amount on hand November 30) . . . . .	55,400 00	
Approved schedules of 1922 . . . . .	640,099 07	
		718,865 46

#### Special appropriations:

Balance of 1921 . . . . .	\$6,121 66	
Approved schedules of 1922 . . . . .	48,463 28	
		54,584 94

Total . . . . .	\$858,777 75
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\$800 received by Department of Mental Diseases and paid by them direct to the Treasurer of the Commonwealth.



*Payments.*

## To treasury of Commonwealth:

Institution income . . . . .	\$82,320 61	
Refunds, account of maintenance . . . . .	24 54	
	<hr/>	\$82,345 15

## Maintenance appropriations:

Balance of schedules of previous year . . . . .	\$26,373 13	
Approved schedules of 1922 . . . . .	\$640,099 07	
Less returned . . . . .	24 54	
	<hr/>	640,074 53
November advances . . . . .	31,142 29	
	<hr/>	697,589 95

## Special appropriations:

Balance of schedules of previous year . . . . .	\$6,121 66	
Approved schedules of 1922 . . . . .	48,463 28	
	<hr/>	54,584 94

## Balance Nov. 30, 1922:

In bank . . . . .	\$23,380 49	
In office . . . . .	877 22	
	<hr/>	24,257 71

Total . . . . .		\$858,777 75
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## MAINTENANCE.

Balance from previous year, brought forward . . . . .	\$7 27
Appropriation, current year . . . . .	727,400 00

Total . . . . .	\$727,407 27
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Expenses (as analyzed below) . . . . .	713,437 02
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Balance reverting to treasury of Commonwealth . . . . .	\$13,970 25
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*Analysis of Expenses.*

Personal services . . . . .	\$300,848 18
Religious instruction . . . . .	2,080 00
Travel, transportation and office expenses . . . . .	9,480 56
Food . . . . .	169,597 95
Clothing and materials . . . . .	27,324 38
Furnishings and household supplies . . . . .	44,728 94
Medical and general care . . . . .	18,614 25
Heat, light and power . . . . .	74,852 57
Farm . . . . .	7,755 69
Garage, stable and grounds . . . . .	9,977 60
Repairs, ordinary . . . . .	20,630 62
Repairs and renewals . . . . .	27,546 28

Total expenses for maintenance . . . . .	\$713,437 02
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## SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1921 . . . . .	\$24,754 01
Appropriations for current year . . . . .	72,000 00

Total . . . . .	\$96,754 01
Expended during the year (see statement below) . . . . .	54,643 62

Balance Nov. 30, 1922, carried to next year . . . . .	\$42,110 39
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OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Total expended to Date.	Balance at End of Year.
Male infirmary . . . . .	1918, Chap. 50 1920, Chap. 629 1921, Chap. 203 1919, Chap. 211 1920, Chap. 225 1920, Chap. 629 1921, Chap. 203 1919, Chap. 211 1920, Chap. 629 1919, Chap. 211 1920, Chap. 225 1920, Chap. 629 1921, Chap. 203 1921, Chap. 203 1921, Chap. 203 1922, Chap. 129 1922, Chap. 129 1922, Chap. 129 1922, Chap. 129	\$404,595 80	-	\$400,618 60	\$3,977 20
Home for 90 nurses . . . . .		152,700 00	\$1,475 93	151,230 55	1,469 45
Dining room, East Group . . . . .		152,000 00	-	150,579 32	1,420 68
Dining room, West Group . . . . .		224,100 00	1,846 72	223,086 04	1,013 96
Laundry . . . . .		15,000 00	1,357 57	4,561 98	10,438 02
Sewer line . . . . .		5,000 00	802 01	4,047 53	952 47
Veranda C . . . . .		8,000 00	6,754 10	6,754 10	1,245 90
Veranda G . . . . .		5,000 00	4,109 00	4,109 00	891 00
Addition to bakery . . . . .		36,000 00	31,654 37	31,654 37	4,345 63
Addition to refrigerating room . . . . .		23,000 00	6,643 92	6,643 92	16,356 08
		\$1,025,395 80	\$54,643 62	\$983,285 41	\$42,110 39

## RESOURCES AND LIABILITIES.

*Resources.*

Cash on hand . . . . .	\$24,257 71	
November cash vouchers (paid from advance money), account of maintenance . . . . .	31,142 29	
		<hr/>
		\$55,400 00
Due from treasury of Commonwealth:		
From available appropriation, account of November, 1922, schedule	17,962 49	
Special appropriation . . . . .	6,180 34	
		<hr/>
		\$79,542 83

*Liabilities.*

Outstanding schedules of current year:		
Schedule of November bills . . . . .	\$73,362 49	
Special appropriation . . . . .	6,180 34	
		<hr/>
		\$79,542 83

## PER CAPITA.

During the year the average number of inmates has been 2,012.83.  
 Total cost for maintenance, \$713,437.02.  
 Equal to a weekly per capita cost of \$6.8162.  
 Receipt from sales, \$1,491.18.  
 Equal to a weekly per capita of \$0.0142.  
 All other institution receipts, \$80,829.43.  
 Equal to a weekly per capita of \$0.7722.  
 Net weekly per capita cost, \$6.0298.

Respectfully submitted,

ADELINE J. LEARY,  
*Treasurer.*

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,  
*Auditor.*

## STATISTICAL TABLES

AS ADOPTED BY THE AMERICAN PSYCHIATRIC ASSOCIATION.

PRESCRIBED BY MASSACHUSETTS DEPARTMENT OF MENTAL DISEASES.

TABLE 1. — *General Information.*

1. Date of opening as an institution for the insane: Dec. 11, 1839.
2. Type of institution: State since Dec. 1, 1908.
3. Hospital plant:
Value of hospital property:
Real estate, including buildings . . . . . \$3,264,875 20
Personal property . . . . . 318,268 11
Total . . . . . \$3,583,143 31

Total acreage of hospital property owned, 233.

Total acreage under cultivation during previous year, 145.

	ACTUALLY IN SERVICE AT END OF YEAR.			VACANCIES AT END OF YEAR.		
	Males.	Fe- males.	Totals.	Males.	Fe- males.	Totals.
4. Officers and employees:						
Superintendents . . . . .	1	—	1	—	—	—
Assistant superintendent . . . . .	1	—	1	—	—	—
Assistant physicians . . . . .	4	4	8	3	—	3
Pathologist . . . . .	—	—	—	1	—	1
Medical internes . . . . .	—	—	—	—	—	—
Clinical assistants . . . . .	—	—	—	—	—	—
Total physicians . . . . .	6	4	10	4	—	4
Stewards . . . . .	1	—	1	—	—	—
Resident dentists . . . . .	1	—	1	—	—	—
Graduate nurses . . . . .	—	19	19	5	23	28
Other nurses and attendants . . . . .	105	104	209			
Teachers of occupational therapy . . . . .	1	4	5	—	—	—
Social workers . . . . .	—	3	3	—	—	—
All other officers and employees . . . . .	81	73	154	—	—	—
Total officers and employees . . . . .	189	203	392	5	23	28
Grand total . . . . .	195	207	402	9	23	32

TABLE 1. — *General Information* — Concluded.

	ACTUALLY IN IN-STITUTION.			ABSENT FROM INSTITUTION BUT STILL ON BOOKS.		
	Males.	Fe- males.	Totals.	Males.	Fe- males.	Totals.
5. Census of patient population at end of year:						
White:						
Insane . . . . .	891	1,117	2,008	106	181	287
Epileptics . . . . .	—	—	—	—	—	—
Mental defectives . . . . .	—	—	—	—	—	—
Alcoholics . . . . .	—	—	—	—	—	—
Drug addicts . . . . .	—	—	—	—	—	—
Neurosyphilitics (without psy- chosis) . . . . .	—	—	—	—	—	—
All other cases . . . . .	—	—	—	—	—	—
Total . . . . .	891	1,117	2,008	106	181	287
Colored:						
Insane . . . . .	23	27	50	2	4	6
Epileptics . . . . .	—	—	—	—	—	—
Mental defectives . . . . .	—	—	—	—	—	—
Alcoholics . . . . .	—	—	—	—	—	—
Drug addicts . . . . .	—	—	—	—	—	—
Neurosyphilitics (without psy- chosis) . . . . .	—	—	—	—	—	—
All other cases . . . . .	—	—	—	—	—	—
Total . . . . .	23	27	50	2	4	6
Grand total . . . . .	914	1,144	2,058	108	185	293
6. Patients employed in industrial classes or in general hospital work on date of re- port . . . . .		Males.	Females.	Totals.		
		480	480	960		
7. Average daily number of all patients actually in institution during year . . . . .	886.41	1,091.96	1,978.37			
8. Voluntary patients admitted during year . . . . .	4	6	10			
9. Persons given advice or treatment in out- patient clinics during year . . . . .	—	—	—			

TABLE 2. — *Financial Statement.*

See treasurer's report for data requested under this table.





TABLE 4. — *Nativity of First Admissions and of Parents of First Admissions for the Year ending Sept. 30, 1922.*

NATIVITY.	PATIENTS.			PARENTS OF MALE PATIENTS.			PARENTS OF FEMALE PATIENTS.		
	Males.	Females.	Totals.	Fathers.	Mothers.	Both Parents.	Fathers.	Mothers.	Both Parents.
United States . . . . .	117	113	230	43	37	30	50	48	40
Australia . . . . .	—	1	1	—	—	—	—	—	—
Austria . . . . .	3	1	4	2	2	—	—	—	—
Canada <sup>1</sup> . . . . .	20	27	47	16	15	11	16	19	15
Denmark . . . . .	—	1	1	—	—	—	2	1	1
England . . . . .	5	4	9	6	5	4	11	6	5
Europe <sup>2</sup> . . . . .	—	2	2	—	—	—	4	4	4
Finland . . . . .	—	—	—	—	—	—	—	1	—
France . . . . .	2	2	4	2	1	1	3	2	2
Germany . . . . .	5	3	8	8	7	7	4	3	3
Holland . . . . .	2	—	2	2	2	2	—	—	—
Ireland . . . . .	34	58	92	59	59	55	87	86	81
Italy . . . . .	14	9	23	18	18	18	12	11	11
Jugo-Slavia . . . . .	3	—	3	3	3	3	—	—	—
Norway . . . . .	—	1	1	1	1	1	1	1	1
Poland . . . . .	1	3	4	1	1	1	5	5	5
Portugal . . . . .	3	—	3	2	2	2	—	—	—
Roumania . . . . .	—	—	—	1	1	1	—	—	—
Russia . . . . .	14	15	29	18	17	17	16	16	16
Scotland . . . . .	1	1	2	2	3	2	1	3	1
Spain . . . . .	—	—	—	1	—	—	—	—	—
Sweden . . . . .	5	2	7	6	5	5	4	3	3
Turkey in Asia . . . . .	1	—	1	1	1	1	1	1	1
Turkey in Europe . . . . .	1	—	1	1	1	1	—	—	—
West Indies <sup>3</sup> . . . . .	1	—	1	1	1	1	—	—	—
Unascertained . . . . .	3	1	4	41	53	41	27	34	27
Total . . . . .	235	244	479	235	235	206	244	244	216

<sup>1</sup> Includes Newfoundland.<sup>2</sup> Not otherwise specified.<sup>3</sup> Except Cuba and Porto Rico.TABLE 5. — *Citizenship of First Admissions for the Year ending Sept. 30, 1922.*

	Males.	Females.	Totals.
Citizens by birth . . . . .	117	113	230
Citizens by naturalization . . . . .	56	41	97
Aliens . . . . .	43	73	116
Citizenship unascertained . . . . .	19	17	36
Total . . . . .	235	244	479

TABLE 6. — *Psychoses of First Admissions for the Year ending Sept. 30, 1922.*

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	.	.	.	3	-	3
2. Senile, total . . . . .	17	14	31	25	34	59
(a) Simple deterioration . . . . .	1	2	3			
(b) Presbyophrenic type . . . . .	-	-	-			
(c) Delirious and confused states . . . . .	1	10	11			
(d) Depressed and agitated states in addition to deterioration . . . . .	3	6	9			
(e) Paranoid states in addition to deterioration . . . . .	3	2	5			
(f) Presenile types . . . . .	.	.	.			
3. With cerebral arteriosclerosis . . . . .	.	.	.	39	46	85
4. General paralysis . . . . .	.	.	.	40	9	49
5. With cerebral syphilis . . . . .	.	.	.	-	2	2
6. With Huntington's chorea . . . . .	.	.	.	1	-	1
7. With brain tumor . . . . .	.	.	.	-	1	1
8. With other brain or nervous diseases, total . . . . .	.	.	.	2	4	6
(a) Cerebral embolism . . . . .	.	1	1			
(b) Paralysis agitans . . . . .	1	-	1			
(c) Meningitis, tubercular or other forms . . . . .	1	-	1			
(d) Multiple sclerosis . . . . .	-	-	-			
(e) Tabes dorsalis . . . . .	-	-	-			
(f) Acute chorea . . . . .	-	-	-			
(g) Other diseases . . . . .	-	3	3			
9. Alcoholic, total . . . . .	.	.	.	31	14	45
(a) Pathological intoxication . . . . .	5	1	6			
(b) Delirium tremens . . . . .	-	-	-			
(c) Acute hallucinosis . . . . .	6	5	11			
(d) Acute paranoid type . . . . .	4	1	5			
(e) Korsakow's psychosis . . . . .	-	2	2			
(f) Chronic hallucinosis . . . . .	5	2	7			
(g) Chronic paranoid type . . . . .	7	1	8			
(h) Alcoholic deterioration . . . . .	4	2	6			
(i) Other types, acute or chronic . . . . .	-	-	-			
10. Due to drugs and other exogenous toxins . . . . .	.	.	.	-	-	-
11. With pellagra . . . . .	.	.	.	-	1	1
12. With other somatic diseases, total . . . . .	.	.	.	4	11	15
(a) Delirium with infectious diseases . . . . .	-	-	-			
(b) Post-infectious psychosis . . . . .	-	1	1			
(c) Exhaustion delirium . . . . .	-	2	2			
(d) Delirium of unknown origin . . . . .	-	1	1			
(e) Cardiorenal diseases . . . . .	3	-	3			
(f) Diseases of the ductless glands . . . . .	-	-	-			
(g) Other diseases or conditions . . . . .	1	7	8			
13. Manic-depressive, total . . . . .	.	.	.	11	40	51
(a) Manic type . . . . .	8	18	26			
(b) Depressive type . . . . .	2	21	23			
(c) Stupor . . . . .	-	-	-			
(d) Mixed type . . . . .	1	1	2			
(e) Circular type . . . . .	-	-	-			
14. Involution melancholia . . . . .	.	.	.	8	5	13

TABLE 6. — *Psychoses of First Admissions for the Year ending Sept. 30, 1922* — Concluded.

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
15. Dementia praecox, total . . . . .	43	33	76			
(a) Paranoid type . . . . .	24	17	41			
(b) Catatonic type . . . . .	12	7	19			
(c) Hebephrenic type . . . . .	6	6	12			
(d) Simple type . . . . .	1	3	4			
16. Paranoia and paranoid conditions . . . . .	3	24	27			
17. Epileptic, total . . . . .	3	1	4			
(a) Deterioration . . . . .	—	—	—			
(b) Clouded states . . . . .	3	1	4			
(c) Other conditions . . . . .	—	—	—			
18. Psychoneuroses and neuroses, total . . . . .	3	—	3			
(a) Hysterical type . . . . .	—	—	—			
(b) Psychasthenic type . . . . .	1	—	1			
(c) Neurasthenic type . . . . .	2	—	2			
(d) Anxiety neuroses . . . . .	—	—	—			
19. With psychopathic personality . . . . .	2	2	4			
20. With mental deficiency . . . . .	8	7	15			
21. Undiagnosed . . . . .	9	4	13			
22. Without psychosis, total . . . . .	—	6	6			
(a) Epilepsy without psychosis . . . . .	—	—	—			
(b) Alcoholism without psychosis . . . . .	—	—	—			
(c) Drug addiction without psychosis . . . . .	—	—	—			
(d) Psychopathic personality without psychosis . . . . .	—	—	—			
(e) Mental deficiency without psychosis . . . . .	—	6	6			
(f) Others . . . . .	—	—	—			
Total . . . . .	235	244	479			





TABLE 7. — *Race of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922* — Continued.

RACE.	PSYCHOSES.																				
	WITH OTHER BRAIN OR NERVOUS DISEASES.			ALCOHOLIC.			WITH PELLAGRA.			WITH OTHER SOMATIC DISEASES.			MANIC- DEPRESSIVE.			INVOLUTION MELANCHOLIA.			DEMENTIA PRAECOX.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
African (black)	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Armenian	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Dutch and Flemish	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
English	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
French	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
German	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Hebrew	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Irish	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Italian 1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Lithuanian	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Magyar	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Portuguese	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Scandinavian 2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Scotch	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Slavonic 3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Spanish	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Syrian	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Mixed	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Race unascertained	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	1	4
Total . . . . .	2	4	6	31	14	45	-	1	1	15	11	40	51	8	5	13	43	33	76		

<sup>1</sup> Includes "North" and "South."

<sup>2</sup> Norwegians, Danes and Swedes.

<sup>3</sup> Includes Bohemian, Bosnian, Croatian, Dalmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian, and Yugoslav.



TABLE 8. — Age of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.

PSYCHOSES.	TOTAL.			YEARS.												40-44.								
	Males.	Females.	Totals.	UNDER 15.		15-19.		20-24.		25-29.		30-34.		35-39.		Males.	Females.	Totals.						
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.									
1. Traumatic . . . . .	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
2. Senile . . . . .	25	34	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
3. With cerebral arteriosclerosis . . . . .	39	46	85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
4. General paralysis . . . . .	40	9	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
5. With cerebral syphilis . . . . .	2	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
6. With Huntington's chorea . . . . .	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
7. With brain tumor . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
8. With other brain or nervous diseases . . . . .	2	4	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
9. Alcoholic . . . . .	31	14	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
11. With pellagra . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
12. With other somatic diseases . . . . .	4	11	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
13. Manic-depressive . . . . .	11	40	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
14. Involution melancholia . . . . .	8	5	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
15. Dementia precox . . . . .	43	33	76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
16. Paranoia or paranoid conditions . . . . .	3	24	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
17. Epileptic . . . . .	3	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
18. Psychoneuroses and neuroses . . . . .	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
19. With psychopathic personality . . . . .	2	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
20. With mental deficiency . . . . .	8	7	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
21. Undiagnosed . . . . .	9	4	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
22. Without psychosis . . . . .	—	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
Total . . . . .	235	244	479	1	1	2	8	7	15	18	20	38	21	16	37	19	12	31	17	28	45	14	17	31



TABLE 9. — Degree of Education of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.

PSYCHOSES.	TOTAL.			ILLITERATE.			READS AND WRITES. <sup>1</sup>			COMMON SCHOOL.			HIGH SCHOOL.			COLLEGE.			UNASCERTAINED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	3	—	3	—	—	—	1	—	1	2	—	2	—	—	—	—	—	—	—	—	—
2. Senile . . . . .	25	34	59	3	4	7	6	12	18	12	11	23	—	—	—	—	—	—	—	—	—
3. With cerebral arteriosclerosis . . . . .	39	46	85	3	8	11	11	1	12	17	15	32	—	—	—	—	—	—	—	—	—
4. General paralysis . . . . .	40	9	49	2	—	2	4	—	4	20	7	27	—	—	—	—	—	—	—	—	—
5. With cerebral syphilis . . . . .	—	2	2	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—
6. With Huntington's chorea . . . . .	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. With brain tumor . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	2	1	3	—	—	—	1	2	3	15	7	22	2	—	—	1	—	—	—	—	—
9. Alcoholic . . . . .	31	14	45	6	4	10	6	3	9	—	—	—	—	—	—	—	—	—	—	—	—
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11. With pellagra . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12. With other somatic diseases . . . . .	4	11	15	—	—	—	—	—	—	3	7	10	1	1	2	—	—	—	—	—	—
13. Manic-depressive . . . . .	11	40	51	—	3	3	2	5	7	7	21	28	1	9	10	1	—	—	—	—	—
14. Involution melancholia . . . . .	8	5	13	1	1	2	—	2	2	7	1	8	1	1	2	—	—	—	—	—	—
15. Dementia praecox . . . . .	43	33	76	5	3	8	5	1	6	26	12	38	10	13	23	1	1	2	—	—	—
16. Paranoia or paranoid conditions . . . . .	3	24	27	—	1	1	—	1	1	—	20	21	1	1	2	1	1	2	—	—	—
17. Epileptic . . . . .	3	1	4	—	—	—	1	—	1	—	—	—	1	—	1	—	—	—	—	—	—
18. Psychoneuroses and neuroses . . . . .	3	3	6	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—
19. With psychopathic personality . . . . .	2	2	4	—	—	—	—	—	—	2	1	3	—	—	—	—	—	—	—	—	—
20. With mental deficiency . . . . .	8	7	15	4	2	6	3	1	4	—	5	6	—	—	—	—	—	—	—	—	—
21. Undiagnosed . . . . .	9	4	13	2	—	2	1	1	2	3	1	4	—	—	—	—	—	—	—	—	—
22. Without psychosis . . . . .	—	6	6	—	2	2	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—
Total . . . . .	235	244	479	22	29	51	42	32	74	118	116	234	28	33	61	8	4	12	17	30	47

<sup>1</sup> Includes those who did not complete fourth grade in school.



TABLE 10. — *Environment of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.*

PSYCHOSES.	TOTAL.			URBAN.			RURAL.			UNASCERTAINED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	3	—	3	3	—	3	—	—	—	—	—	—
2. Senile . . . . .	25	34	59	25	34	59	—	—	—	—	—	—
3. With cerebral arteriosclerosis . . . . .	39	46	85	39	46	85	—	—	—	—	—	—
4. General paralysis . . . . .	40	9	49	40	9	49	—	—	—	—	—	—
5. With cerebral syphilis . . . . .	—	2	2	—	2	2	—	—	—	—	—	—
6. With Huntington's chorea . . . . .	1	—	1	1	—	1	—	—	—	—	—	—
7. With brain tumor . . . . .	—	1	1	—	1	1	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	2	4	6	2	4	6	—	—	—	—	—	—
9. Alcoholic . . . . .	31	14	45	31	14	45	—	—	—	—	—	—
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
11. With pellagra . . . . .	—	1	1	—	1	1	—	—	—	—	—	—
12. With other somatic diseases . . . . .	4	11	15	4	11	15	—	—	—	—	—	—
13. Manic-depressive . . . . .	11	40	51	11	40	51	—	—	—	—	—	—
14. Involution melancholia . . . . .	8	5	13	8	5	13	—	—	—	—	—	—
15. Dementia precox . . . . .	43	33	76	43	33	76	—	—	—	—	—	—
16. Paranoia or paranoid conditions . . . . .	3	24	27	3	24	27	—	—	—	—	—	—
17. Epileptic . . . . .	3	1	4	3	1	4	—	—	—	—	—	—
18. Psychoneuroses and neuroses . . . . .	3	—	3	3	—	3	—	—	—	—	—	—
19. With psychopathic personality . . . . .	2	2	4	2	2	4	—	—	—	—	—	—
20. With mental deficiency . . . . .	8	7	15	8	7	15	—	—	—	—	—	—
21. Undiagnosed . . . . .	9	4	13	9	4	13	—	—	—	—	—	—
22. Without psychosis . . . . .	—	6	6	—	6	6	—	—	—	—	—	—
Total . . . . .	235	244	479	235	244	479	—	—	—	—	—	—

TABLE 11. — *Economic Condition of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.*

PSYCHOSES.	TOTAL.			DEPENDENT.			MARGINAL.			COMFORTABLE.			UNASCERTAINED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	3	—	3	1	—	1	2	—	2	1	—	1	8	—	8
2. Senile . . . . .	25	34	59	5	12	17	11	10	21	1	2	3	—	10	18
3. With cerebral arteriosclerosis . . . . .	39	46	85	10	17	27	18	9	27	5	3	8	6	17	23
4. General paralysis . . . . .	40	9	49	5	2	7	29	3	32	2	2	4	4	2	6
5. With cerebral syphilis . . . . .	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—
6. With Huntington's chorea . . . . .	1	—	1	1	—	1	—	—	1	—	—	—	—	—	—
7. With brain tumor . . . . .	—	1	1	—	—	—	1	1	2	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	2	4	6	2	2	4	1	1	2	2	1	3	1	2	3
9. Alcoholic . . . . .	31	14	45	9	2	11	19	9	28	2	1	3	—	—	—
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11. With pellagra . . . . .	—	1	1	—	—	—	—	—	1	—	—	—	—	—	—
12. With other somatic diseases . . . . .	4	11	15	—	1	1	3	4	7	—	4	4	1	2	3
13. Manic-depressive . . . . .	11	40	51	2	2	4	9	20	29	—	14	14	—	4	4
14. Involution melancholia . . . . .	8	5	13	1	—	1	5	4	9	2	—	2	—	1	1
15. Dementia præcox . . . . .	43	33	76	14	7	21	28	12	40	1	10	11	—	4	4
16. Paranoia or paranoid conditions . . . . .	3	24	27	2	3	5	1	17	18	1	2	3	—	2	2
17. Epileptic . . . . .	3	1	4	1	—	1	2	—	2	—	—	—	—	1	1
18. Psychoneuroses and neuroses . . . . .	3	3	6	—	—	—	3	—	3	—	—	—	—	—	—
19. With psychopathic personality . . . . .	2	2	4	1	—	1	1	—	1	—	—	—	—	1	1
20. With mental deficiency . . . . .	8	7	15	4	1	5	4	5	9	—	1	1	—	—	—
21. Undiagnosed . . . . .	9	4	13	2	—	2	7	4	11	—	—	—	—	—	—
22. Without psychosis . . . . .	—	6	6	—	5	5	—	1	1	—	—	—	—	—	—
Total . . . . .	235	244	479	58	54	112	143	103	246	13	41	54	21	46	67

TABLE 12. — *Use of Alcohol by First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.*

PSYCHOSES.	TOTAL.			ABSTINENT.			TEMPERATE.			INTERMEDIATE.			UNASCERTAINED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	3	—	3	—	—	—	2	—	2	1	—	1	1	—	1
2. Senile . . . . .	25	34	59	6	22	28	9	6	15	7	1	8	3	5	8
3. With cerebral arteriosclerosis . . . . .	39	46	85	13	27	40	15	10	25	9	—	9	2	9	11
4. General paralysis . . . . .	40	9	49	8	4	12	17	3	20	9	2	11	6	—	6
5. With cerebral syphilis . . . . .	—	2	2	—	1	1	—	—	—	—	1	1	—	—	—
6. With Huntington's chorea . . . . .	1	—	1	—	—	—	1	—	1	—	—	—	—	—	—
7. With brain tumor . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	2	4	6	—	2	2	1	1	2	—	—	—	1	1	2
9. Alcoholic . . . . .	31	14	45	—	—	—	—	—	—	31	13	44	—	—	—
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11. With pellagra . . . . .	—	1	1	—	1	1	—	—	—	—	—	—	—	—	—
12. With other somatic diseases . . . . .	4	11	15	2	7	9	—	—	3	2	—	2	—	—	1
13. Manic-depressive . . . . .	11	40	51	7	27	34	2	10	12	2	—	2	—	3	3
14. Involution melancholia . . . . .	8	5	13	3	2	5	3	2	5	2	1	3	—	—	—
15. Dementia praecox . . . . .	43	33	76	29	27	56	10	5	15	2	—	2	2	1	3
16. Paranoia or paranoid conditions . . . . .	3	24	27	1	19	20	2	4	6	—	—	—	—	1	1
17. Epileptic . . . . .	3	1	4	2	—	2	1	—	1	—	—	—	—	—	—
18. Psychoneuroses and neuroses . . . . .	3	3	6	1	2	3	2	—	2	—	—	—	—	—	—
19. With psychopathic personality . . . . .	2	2	4	1	3	4	1	—	1	—	—	—	—	—	—
20. With mental deficiency . . . . .	8	7	15	7	3	10	1	3	4	2	1	3	2	—	2
21. Undiagnosed . . . . .	9	4	13	1	3	4	4	—	4	—	—	—	—	—	—
22. Without psychosis . . . . .	—	6	6	—	4	4	—	2	2	—	—	—	—	—	—
Total . . . . .	235	244	479	81	151	232	71	51	122	67	20	87	16	22	38

TABLE 13. — *Marital Condition of First Admissions classified with Reference to Principal Psychoses for the Year ending Sept. 30, 1922.*

PSYCHOSES.	TOTAL.			SINGLE.			MARRIED.			WIDOWED.			SEPARATED.			DIVORCED.			UNASCRIBED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	3	—	3	1	—	1	2	—	2	13	21	34	1	—	1	1	—	1	1	—	1
2. Senile . . . . .	25	34	59	2	5	7	8	8	16	8	26	34	1	—	1	—	—	—	—	—	—
3. With cerebral arteriosclerosis . . . . .	39	46	85	5	12	17	26	6	34	8	34	42	—	—	—	—	—	—	—	—	—
4. General paralysis . . . . .	40	9	49	6	2	8	29	2	35	4	1	5	—	—	—	—	—	—	—	—	—
5. With cerebral syphilis . . . . .	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. With Huntington's chorea . . . . .	1	1	2	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. With brain tumor . . . . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	2	4	6	1	—	1	16	3	3	1	1	2	3	—	3	1	—	—	—	—	—
9. Alcoholic . . . . .	31	14	45	14	1	15	10	10	26	—	—	—	—	—	—	—	—	—	—	—	—
10. Due to drugs and other exogenous toxins . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11. With pellagra . . . . .	4	11	15	—	—	—	4	6	10	—	—	—	—	—	—	—	—	—	—	—	—
12. With other somatic diseases . . . . .	—	—	—	—	—	—	1	4	5	—	—	—	—	—	—	—	—	—	—	—	—
13. Manic-depressive . . . . .	11	40	51	7	15	22	4	22	26	—	—	—	—	—	—	1	—	1	—	—	—
14. Involution melancholia . . . . .	8	5	13	2	1	3	6	1	7	—	—	—	—	—	—	—	—	—	—	—	—
15. Dementia praecox . . . . .	43	33	76	34	23	57	7	10	17	2	—	—	—	—	—	1	—	1	—	—	—
16. Paranoia or paranoid conditions . . . . .	3	24	27	1	8	9	1	13	14	—	—	—	—	—	—	—	—	—	—	—	—
17. Epileptic . . . . .	3	—	3	1	—	1	2	1	3	—	—	—	—	—	—	—	—	—	—	—	—
18. Psychoneuroses and neuroses . . . . .	3	—	3	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—
19. With psychopathic personality . . . . .	2	2	4	2	1	3	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—
20. With mental deficiency . . . . .	8	7	15	2	5	7	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
21. Undiagnosed . . . . .	9	4	13	8	1	9	—	2	2	—	—	1	—	—	—	—	—	—	1	—	1
22. Without psychosis . . . . .	—	6	6	—	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total . . . . .	235	244	479	93	82	175	108	96	204	29	64	93	1	—	1	1	2	3	3	—	3

TABLE 14. — *Psychoses of Readmissions for the Year ending Sept. 30, 1922.*

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	1	—	1			
2. Senile, total . . . . .	—	4	4			
(a) Simple deterioration . . . . .	—	2	2			
(b) Presbyophrenic type . . . . .	—	—	—			
(c) Delirious and confused states . . . . .	—	—	—			
(d) Depressed and agitated states in addition to deterioration . . . . .	—	1	1			
(e) Paranoid states in addition to deterioration . . . . .	—	1	1			
(f) Presenile types . . . . .	—	—	—			
3. With cerebral arteriosclerosis . . . . .	2	2	4			
4. General paralysis . . . . .	6	1	7			
5. With cerebral syphilis . . . . .	3	—	3			
6. With Huntington's chorea . . . . .	—	—	—			
7. With brain tumor . . . . .	—	—	—			
8. With other brain or nervous diseases, total . . . . .	2	1	3			
Cerebral embolism . . . . .	—	1	1			
Paralysis agitans . . . . .	—	—	—			
Meningitis, tuberculous or other forms . . . . .	—	—	—			
Multiple sclerosis . . . . .	—	—	—			
Tabes . . . . .	1	—	1			
Acute chorea . . . . .	—	—	—			
Other conditions . . . . .	1	—	1			
9. Alcoholic, total . . . . .	8	4	12			
(a) Pathological intoxication . . . . .	—	—	—			
(b) Delirium tremens . . . . .	—	—	—			
(c) Acute hallucinosis . . . . .	—	—	—			
(d) Acute paranoid type . . . . .	—	—	—			
(e) Korsakow's psychosis . . . . .	—	—	—			
(f) Chronic hallucinosis . . . . .	3	1	4			
(g) Chronic paranoid type . . . . .	—	—	—			
(h) Alcoholic deterioration . . . . .	5	3	8			
(i) Other types, acute or chronic . . . . .	—	—	—			
10. Due to drugs and other exogenous toxins, total . . . . .	—	—	—			
11. With pellagra . . . . .	—	—	—			
12. With other somatic diseases, total . . . . .	—	2	2			
(a) Delirium with infectious diseases . . . . .	—	—	—			
(b) Post-infectious psychoses . . . . .	—	—	—			
(c) Exhaustion delirium . . . . .	—	—	—			
(d) Delirium of unknown origin . . . . .	—	—	—			
(e) Diseases of the ductless glands . . . . .	—	—	—			
(f) Cardiorenal disease . . . . .	—	1	1			
(g) Other diseases or conditions . . . . .	—	1	1			
13. Manic-depressive psychoses, total . . . . .	14	17	31			
(a) Manic type . . . . .	5	5	10			
(b) Depressive type . . . . .	7	11	18			
(c) Stupor . . . . .	1	—	1			
(d) Mixed type . . . . .	1	1	2			
(e) Circular type . . . . .	—	—	—			
14. Involution melancholia . . . . .	—	1	1			



TABLE 14. — *Psychoses of Readmissions for the Year ending Sept. 30, 1922* — Concluded.

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
15. Dementia precox, total . . . . .				17	13	30
(a) Paranoid type . . . . .	10	7	17			
(b) Catatonic type . . . . .	2	—	2			
(c) Hebephrenic type . . . . .	2	5	7			
(d) Simple type . . . . .	3	1	4			
16. Paranoia or paranoid conditions . . . . .				—	8	8
17. Epileptic, total . . . . .				—	—	—
18. Psychoneuroses and neuroses, total . . . . .				—	2	2
(a) Hysterical type . . . . .	—	1	1			
(b) Psychasthenic type . . . . .	—	—	—			
(c) Neurasthenic type . . . . .	—	1	1			
(d) Anxiety neuroses . . . . .	—	—	—			
19. With psychopathic personality . . . . .				—	2	2
20. With mental deficiency . . . . .				3	1	4
21. Undiagnosed . . . . .				1	—	1
22. Without psychosis, total . . . . .				2	1	3
(a) Epilepsy without psychosis . . . . .	—	—	—			
(b) Alcoholism without psychosis . . . . .	—	—	—			
(c) Drug addiction without psychosis . . . . .	—	—	—			
(d) Psychopathic personality without psychosis . . . . .	—	—	—			
(e) Mental deficiency without psychosis . . . . .	1	1	2			
(f) Others . . . . .	1	—	1			
Simple depression . . . . .	1	—	1			
Total . . . . .				59	59	118

TABLE 15. — Discharges of Patients classified with Reference to Principal Psychoses and Condition on Discharge for the Year ending Sept. 30, 1922.

PSYCHOSES.	TOTAL.			RECOVERED.			IMPROVED.			UNIMPROVED.			WITHOUT PSYCHOSIS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	1	—	1	—	—	—	1	1	2	2	—	4	1	—	1
2. Senile . . . . .	3	3	6	—	—	—	1	6	7	7	—	13	—	—	13
3. With cerebral arteriosclerosis . . . . .	6	7	13	—	—	—	1	6	7	7	—	13	—	—	13
4. General paralysis . . . . .	3	3	6	—	—	—	1	2	3	2	1	3	—	—	3
5. With cerebral syphilis . . . . .	1	—	1	—	—	—	—	—	—	1	—	1	—	—	1
6. With Huntington's chorea . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. With brain tumor . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. With other brain or nervous diseases . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Alcoholic . . . . .	17	3	20	8	2	10	8	1	9	1	—	1	1	—	1
10. Due to drugs and other exogenous toxins . . . . .	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—
11. With pellagra . . . . .	—	2	2	—	2	2	—	—	—	—	—	—	—	—	—
12. With other somatic diseases . . . . .	34	45	79	25	32	57	9	13	22	—	—	3	—	—	3
13. Manic-depressive . . . . .	2	8	10	—	—	—	2	5	7	—	—	7	—	—	7
14. Involution melancholia . . . . .	25	22	47	—	—	—	19	15	34	6	7	13	—	—	19
15. Dementia precox . . . . .	—	10	10	—	1	1	—	6	6	—	—	3	—	—	3
16. Paranoia or paranoid conditions . . . . .	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—
17. Epileptic . . . . .	3	1	4	—	—	—	3	—	3	—	—	1	—	—	1
18. Psychoneuroses and neuroses . . . . .	7	1	8	4	—	4	3	1	4	—	—	—	—	—	—
19. With psychopathic personality . . . . .	1	1	2	—	—	—	1	1	2	—	—	—	—	—	—
20. With mental deficiency . . . . .	1	1	2	1	—	1	—	—	—	—	—	—	—	—	—
21. Undiagnosed . . . . .	3	—	3	—	—	—	—	—	—	—	—	—	3	—	3
22. Without psychosis . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total . . . . .	108	109	217	39	37	76	54	54	108	12	18	30	3	1	3



DIGESTIVE SYSTEM:	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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[illegible]

1 Includes group 22 "without psychosis."







TABLE 18. — *Total Duration of Hospital Life of Patients dying in Hospital classified according to Principal Psychoses for the Year ending Sept. 30, 1922 — Concluded.*

PSYCHOSES.	YEARS.												20 AND OVER.								
	5-6.			7-8.			9-10.			11-12.			13-14.			15-19.			20 AND OVER.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
1. Traumatic . . . . .	2	2	4	1	2	3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
2. Senile . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
3. With cerebral arteriosclerosis . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
4. General paralysis . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
5. With cerebral syphilis . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
6. With Huntington's chorea . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
7. With brain tumor . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
8. With other brain or nervous diseases . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
9. Alcoholic . . . . .	2	2	4	1	2	3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
10. Due to drugs and other exogenous toxins . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
11. With pellagra . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
12. With other somatic diseases . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
13. Manic-depressive . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
14. Involution melancholia . . . . .	3	1	4	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
15. Dementia praecox . . . . .	3	1	4	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
16. Paranoia or paranoid conditions . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
17. Epileptic . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
18. Psychoneuroses and neuroses . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
19. With psychopathic personality . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
20. With mental deficiency . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
21. Undiagnosed . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
22. Without psychosis . . . . .	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
Total . . . . .	9	7	16	3	5	8	1	2	3	3	3	6	1	2	3	3	3	6	1	2	3







